The list below is merely suggestive of those plants easy to cultivate in most regions of the temperate zone, with a few exceptions such as Aloes. It is reduced to a bare minimum:

| Corn | Peppermint | Castor Bean | Lycopodium |
| :--- | :--- | :--- | :--- |
| Oats | Spearmint | Calendula | Flax |
| Larkspur | Digitalis | Aloes | Lobelia |
| Foenugreek | Stramonium | Phytolacca | Triticum |

The educational value obtained from carrying out such a project for students so interested is as follows:

1. It gives him an insight into the requirements for proper drug production.
2. It acquaints him with the climatic and soil requirements for culturing certain drug plants.
3. It gives him an insight into some of the problems involved in drug cultivation such as the effects of plant and animal parasites, moisture requirements, frost sensitiveness, etc.
4. It furnishes him, in a rough way, with data regarding the proper time of collection, as well as in the care of storing the products.
5. It stimulates him to desire more information regarding the plants under his care such as history, properties, constituents, large-scale commercial handling, etc.
6. It supplies him with a limited amount of experience in the art of drug production.
7. It enables him to better understand the problems involved in the production of other drugs not cultivated by him.
8. It prepares him better in his later studies of Botanical, Pharmacognostical, Materia Medica and Toxicology courses which he will be more eager to learn.

## THE ACCOUNTING RECORDS NECESSARY IN AN INDIVIDUALLY OWNED DRUG STORE.*

BY PAUL C. OLSEN. ${ }^{1}$
In a paper which I had the opportunity to present to this Section last year, it was stated that one of the most common causes of the unprofitableness of drug stores is a failure to keep adequate accounting records. I am as firmly of the opinion now as I was then that fully three-quarters of the drug stores in this country have no accounting records which are worthy of the name or which are of the slightest value in guiding the operations of the store. This common failure to maintain in drug stores adequate accounting records results, in large part, because the element of compulsion does not exist with regard to them. They are just like periodic physical examinations and visiting the dentist twice a year. We all agree that they are necessary and desirable, but the tendency is for most of us to put them off indefinitely.

[^0]There are considerable variations in the degree of this compulsion about the maintenance of drug store accounting records. It seems unbelievable that there are drug store proprietors who neglect to keep accurate and complete records of the money that their customers owe to them with resultant difficulties in collecting this money. Yet that is the truth, as anyone will testify who has had the doubtful pleasure of trying to keep open a drug store which, through mismanagement, has reached the brink of bankruptcy. Thus first and most obvious of the records a drug store proprietor needs to keep is a complete and up-to-date account of the purchases that have been made from him on credit.

Next in the order of compulsion is a daily check of the cash received and paid out in the store and similarly of bank deposits and withdrawals. This all sounds very obvious I know, and I am sure that many of you who hear this report are acquainted with drug store proprietors who periodically carry in their pockets the store receipts for a week or more and, as long as they have this money, they regard themselves as well off. They go on oblivious to the steadily mounting pile of bills in their desk drawers and, when their creditors finally catch up with them, they attribute their lack of success to "business conditions" or to "competition."

Turning now to other fundamental records required in a drug store, we find first and most obvious of these records, a tabulation day by day and month by month of the sales of the store. If a substantial part of the sales are on credit, the sales total needs to be divided between cash sales and charge sales and another total recorded of money received on account.

To anyone schooled in the conventional theories of accounting, it is simply astonishing to observe the drug stores in which the only record made of credit sales is a penciled Day Book entry and to remember that these sales only find their way into the general sales total of the store after the accounts have been paid. There is no way, without a tedious tabulation, to learn at any particular time just how much money is owed to the store and what relation the total of this money owed is to the credit sales being made in the store. Obviously, a store in which the money that customers owe totals eight months' average credit sales, is in a much more alarming condition than one in which the money owed by customers on credit purchases is a total which is only two months' average credit sales.

A comparison of the total of customers' outstanding accounts with current credit sales is, therefore, an important fact that is required at least once a month for the efficient and profitable operation of a drug store in which there is a notable amount of credit sales. Such a comparison cannot be made unless it is the practice in the store to record as sales all credit purchases by customers at the time these purchases are made and to record the money that is later received from these customers in payment of their credit purchases as money received on account.

In drug stores in which the monthly sales volume exceeds $\$ 1500$, it is also desirable to maintain separate records of sales for the principal departments of the store. In most drug stores these departments would be the tobacco department, the fountain department and a department representing the rest of the store. From our High School and College algebra we recall that the sum of a group of positive and negative numbers is positive if the total of the positives is larger than that of the negatives. Similarly, in a drug store, if sales are recorded by departments, fluctuations in the sales volumes of these departments, can be noted if they
are separately recorded, while if they are recorded only in total, the departmental fluctuations are unrevealed in the total.

Merchandise purchases need to be recorded in a manner that will provide facts which are of the greatest value in control of this large item of drug store expenditure. Part of these purchases are made for cash and part on credit. The principal difficulty in control of these costs arises from the credit purchases. It is of the utmost importance, therefore, to maintain a cumulative record of accounts payable.

This record starts with the total amount of these accounts payable at the beginning of the accounting period. This accounting period is usually one month. To this total of accounts payable at the beginning of the period is added the amount of purchases of merchandise that were made on credit during the month. From the total of these two items is then subtracted the total amount of merchandise purchases on credit that were paid for during the month. The result of this subtraction is the amount owed at the end of the month for merchandise bought.

No drug store proprietor needs to be told that, if this amount owed for merchandise bought on credit shows a steady rise from month to month without any corresponding increase in sales, his business is headed for serious and perhaps irreparable difficulties. Without such a cumulative record of accounts payable, this periodic warning does not appear.

It happens in many stores that a practice is made of buying equipment on the installment plan. In other instances, money is borrowed and arrangements to repay it on the installment plan are made. As in the case of the cumulative record of accounts payable, it is desirable to maintain a similar cumulative record of notes payable, starting with the total amount of notes owed at the beginning of the accounting period (which, again, is usually one month) and adding to this any new indebtedness on notes incurred during the month. From this total is subtracted the amount paid on the principle of these notes during the month and the result of this subtraction is the amount owed on notes at the end of the month.

As in the case of records of sales in drug stores in which the volume exceeds $\$ 1500$ a month, it is desirable to maintain departmentized records of the merchandise purchases so as to have necessary facts for calculating the cost of the goods sold and the gross margin obtained in each of the principal departments of the store. Ineffective buying control has been found to be such a common cause of unsatisfactory drug store profits that accounting records designed to control to the greatest possible extent merchandise costs are of extreme importance.

The extra work involved in separating merchandise purchases by the principal departments of the store is more than justified by the value of the information so provided. As a matter of fact, on most invoices received in a drug store, all of the items on a particular invoice will be for one department and the total of the invoice, therefore, can be charged to that department. On only a relatively small proportion of the invoices will it be necessary to go over them, item by item, so as to distribute the merchandise listed on these invoices to the departments in which it is to be sold.

Of coördinate importance with the records of merchandise purchased for cash and on credit is a periodic record of the amount of merchandise stock on hand in the store. This, of course, is what is commonly known as the physical inventory. No
drug store exists in which the proprietor is so skilful that he is able to buy merchandise for the store at the exact rate in which the merchandise is selling, thus eliminating any fluctuations in the amount of merchandise stock on hand.

With this impossibility of preventing completely any changes in the amount of merchandise stock on hand, it is apparent that the only way in which the extent of these changes up or down can be measured is to make a periodic and complete count and valuation of the merchandise stock in the store. The common practice, and one which serves all ordinary purposes, is to make store-wide inventories in retail pharmacies once a year.

In drug stores in which the sales volume is large enough to justify separate records of sales and purchases by departments-that is, drug stores in which monthly sales are upward of $\$ 1500$-it is desirable to maintain the annual inventories of the merchandise stock in a manner which shows separate totals at each inventory for the merchandise stock of each department. This permits an exact determination of the cost of goods sold in each department.

In addition to the records for merchandise purchases for cash or on credit, there must be records of the store operating expenses. It is only after the cost of the merchandise sold in the drug store is paid and the expenses of conducting the drug stores have been met that there is any possibility of a profit for the proprietor as a reward for the risk and responsibility he assumes in the operation of the store. Since even under the most skilful management, the amount of this profit is likely to be no more than 10 per cent of sales and, in many instances, not even as much as 5 per cent of sales, it follows that waste, indifference or inefficiency can readily wipe out this narrow margin and cause the store to operate at a loss.

Various classifications of drug store expenses are in use and in a particular drug store the grouping that is used may be different from most other stores because of special conditions in that store. A common classification of drug store operating costs is as follows:

| Salaries | Taxes and Licenses | Delivery |
| :--- | :--- | :--- |
| Rent | Insurance | Advertising |
| Heat | Interest Paid | Miscellaneous |
| Light and Power | Repairs |  |

All of the items listed above are cash expenditures. In addition to this list of expenditures, there occurs in the store each year depreciation on the fixtures and equipment in use in the store. An estimate of the amount of this depreciation is added (usually at the end of the year) to the amount of the other store operating expenses to provide a complete total of all of the costs of operating the store. In drug stores with a substantial amount of credit sales, it is desirable to determine annua'ly and record as a separate expense the losses from bad debts.

With the records outlined, it is a simple matter for a drug store proprietor to prepare an accurate and complete Profit and Loss statement for his store and a Balance Sheet showing the net worth of his business. A common form for a Profit and Loss statement is listed below.

2 Inventory first of year of merchandise stock at cost

3 Accounts payable end of year
4 Total amount of merchandise paid for
5 Add lines 2, 3 and 4
6 Inventory end of year of merchandise at cost
7 Accounts payable first of year
8 Add lines 6 and 7
9 Total cost of goods sold (subtract line 8 from line 5 )
10 Gross margin (subtract line 9 from line 1)
11 Total expenses including depreciation and bad debts
12 Net Profit (subtract line 11 from line 10)
\$ $\qquad$
$\$$
$\qquad$
$\qquad$
$\qquad$
\$.................

Following is a simple and easily used method for recording the Balance Sheet of a drug store and calculating from it the net worth of the business.

| Assets. | Liabilities. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash in store | \$ | Accounts payable | \$ |  |
| Cash in bank |  | Notes payable |  |  |
| Value at cost of merchandise stock |  |  |  |  |
| Present value of fixtures and equipment | ...... |  |  |  |
| Accounts receivable |  |  |  |  |
| Notes receivable | . . . . |  |  |  |
| Total Assets | \$ | Total Liabilities | \$ | ... |
|  | Net Worth of Business | $\left\{\begin{array}{l}\text { Subtract total lia- } \\ \text { bilities from total } \\ \text { assets }\end{array}\right\}$ | \$ | . . |

## PATENT AND PROPRIETARY MEDICINES-THE ECONOMIC EFFECTS OF THEIR PRESENT LEGAL STATUS.*

BY SAMUEL SHKOLNIK. ${ }^{1}$
STATUTORY PROVISIONS.
For a number of decades last past legislatures in every state of the Union have recognized the necessity of proper legal control over the sale and distribution of drugs, medicines and poisons and have passed pharmacy laws for the purpose. The protection of public health and safety was, of course, the underlying basis, motive and purpose, indeed the very legal justification, of all such laws. An examination of these laws will at once reveal that an exemption from their operation was created in the case of so-called "patent and proprietary medicines." These exemptions, while somewhat different in wording in the various state statutes, point to a common origin and seem to have been passed on, "ad valorem," from state to state, apparently with the tacit approval of the medical and pharmaceutical professions. The interested observer will further find that in most of these laws no definition is given for the term "patent and proprietary medicines," and that where a definition is given, it is generally so vague, unscientific and inconsistent, if

[^1]
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