Journal of Accountancy

Volume 61 | Issue 2 Article 5

2-1936

Plant Ledger for a Small Manufacturer

John H. Goodwin

Follow this and additional works at: https://egrove.olemiss.edu/jofa



Part of the Accounting Commons

Recommended Citation

Goodwin, John H. (1936) "Plant Ledger for a Small Manufacturer," Journal of Accountancy: Vol. 61: Iss. 2, Article 5.

Available at: https://egrove.olemiss.edu/jofa/vol61/iss2/5

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Journal of Accountancy by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

The Plant Ledger for a Small Manufacturer

By John H. Goodwin

That many small manufacturing plants have inadequate records of investment in fixed assets is an unfortunate fact and one which must be due only to a failure to realize the importance of keeping such records. Careful and detailed records of the other assets are commonly kept, but that asset which usually represents a large proportion of the invested capital of the company is lumped together in a few major accounts, viz.: land, buildings, machinery and equipment, office equipment.

In the belief that the subject of a plant ledger for a small manufacturing establishment may be of interest, the procedure in installing such a system of fixed-assets accounting in an actual case will be described.

The basic reason for the installation of a plant ledger in the case to be discussed was the necessity for supplying certain information required by the federal income-tax laws and regulations, more specifically that information required by IT: A & C mimeograph coll. No. 4170, R.A. No. 714, which states the procedure to be followed in carrying out the provisions of treasury decision 4422.

The corporation is a small manufacturing plant which makes, for the most part, a uniform product in volume production. It has an invested capital of approximately \$175,000. Its sales normally run from \$300,000 to \$400,000 a year. The annual payroll for 130 employees is about \$135,000, excluding salaries of officers. It has an investment in fixed assets, after depreciation, of approximately \$100,000. These fixed assets, after installation of the plant ledger, were represented by 375 cards.

The installation of the plant ledger was based upon the following sources of information in addition to the books themselves:

- Analyses of fixed-asset accounts prepared previously in the course of regular audits.
- Reports on previous years by examining officers of the United States treasury department.
- 3. An appraisal made a few years prior to the installation.
- A floor plan of the plant divided into departments which had been prepared a short time before in the installation of a cost system.

The analyses of the fixed assets were completed in detail to the end of the last preceding year. By these analyses all additions to fixed-assets accounts were allocated to specific items—if additions to buildings, to a particular building or section of the building; or, if they were machines or office equipment, to a specific machine or item of office equipment. It was possible to do this by reference to invoices, by questioning officers and employees, and by search of the minutes of the corporation. There was a comparatively small amount, representing additions to machinery in the earliest, as yet not fully depreciated, years, which could not be so specifically allocated. These amounts were classified in lump sums by the years in which the additions were made.

After completion of the analyses of the various fixed-asset accounts they were summarized according to the years in which the additions were made to show cost and accumulated depreciation to the end of the last preceding year. The summary schedules so prepared were then compared with similar schedules prepared by the United States treasury department examining officer in the last examination of the taxpayer's books. The causes of any discrepancies were investigated and the schedules were corrected where necessary.

The next step was the preparation of a work sheet for the accumulation of the information necessary in transferring the data to individual plant-ledger sheets. In the case of the "buildings" account, separation was made only into the several buildings or sections of buildings according to purpose, type of construction, date of construction and expected life. "Machinery and equipment" and "office equipment," however, were broken down into specific items and a sheet was used for each machine or piece of equipment.

The work sheets were drawn up to show name of item, from whom purchased, date purchased, cost, reserve for depreciation to the end of the last year closed with the treasury department, which was the year ended December 31, 1932, and estimated remaining life from that date.

The form was as follows:

	Date		Reserve for depreciation	Estimated remaining
Items	purchased	Cost	12-31-32	life
XY Machine	-			
No. etc.				
Blank Co.	3-26-24	\$500	\$300	5 years
		131	-	

The figures to be accumulated on these work sheets were taken from the completed analyses of the fixed-asset accounts mentioned above. The amount of each charge made to the fixed asset account was entered under the name of the individual machine or piece of equipment. In some cases there was only one amount under a machine. In most cases, however, there were several amounts making up to the total cost—as, cost of machine itself, freight, cost of setting up, etc.

After the cost of all assets had been thus transferred to the work sheets, the reserve for depreciation was computed for each machine or piece of equipment and entered in the reserve-for-depreciation column. This computation was made by reference to rates of depreciation previously taken.

At this point all the information had been accumulated and properly classified, except the estimate of the remaining life of each item. Before making this estimate, the figures were proved by totalling all figures for cost and for reserve for depreciation as shown on the work sheets by years in which purchased and comparing these totals with the figures contained in the summary schedules previously made, as mentioned above, showing fixed assets as to cost and reserve for depreciation by years in which the additions were made.

The work sheets were then taken into the plant and an attempt was made to get as accurate an estimate of the remaining useful life as possible by talking with those employees who were most familiar with each machine or other piece of equipment. After tentative estimates of the remaining life of each machine had been made in this way, the entire list was discussed, item by item, with the general manager of the plant, and corrections in the original estimates were made where they were considered necessary.

Now the figures were ready to be entered on plant-ledger sheets—a sheet for each machine or piece of equipment.

These sheets are $4\frac{1}{2}$ inches x $10\frac{1}{2}$ inches, punched along the left-hand edge to be filed in a sturdy binder. The name of the item appears on the bottom of the sheet, so that in filing, each sheet is filed slightly higher on the page than the preceding sheet, thus giving a visible file. The sheets are ruled to show date purchased, voucher number, from whom purchased, explanation (original cost, freight, installation charges, etc.), cost and depreciation—by years and accumulated total. (See form A.)

. Form A										
	Voucher number	From whom purchased	Explanation	Cost		Depreciation				
				Detail	Total	Year	Amount	To date		
Descr	iption									
Locati	ocation Estimated life									
Item	Item Tag number		Sheet number							

After the data had been transferred to the plant-ledger sheets these sheets were arranged according to the departments in which each machine or piece of equipment was located. This allocation by departments was verified by reference to the appraisal report on hand and by actual inspection in the plant. The sheets were then grouped in each department according to estimated remaining life.

Where it was found that machines or equipment were on hand, although there were no cards indicating the existence of such items, investigation was made, if the items were large enough to be of consequence, of the reason for the absence of such a record. The first step was to find by inquiry the approximate date of acquisition. Search was then made of the accounting records to see whether their failure to appear therein was due to the fact that the items in question had not been capitalized or had been fully depreciated and removed from the books.

If the item had not been capitalized, it was entered on a plantledger sheet, depreciation was accrued in accordance with estimated life as indicated by its present condition, and an entry was made on the general books to reveal the capitalization of the item and accrual of depreciation. If, on the other hand, it had been capitalized and subsequently written off as fully depreciated, it was entered on a plant-ledger sheet with cost and depreciation in equal amounts, filed as such with the sheets in its department and recorded in the general ledger accounts.

Where plant-ledger sheets were on hand for which there were no machines or pieces of equipment in existence, it was obvious that

assets had been discarded or sold but had not been removed from the books. In those cases the sheets were destroyed and the items as to cost and accrued depreciation were removed from the accounts in the general ledger.

Working from the plant ledger, each machine or piece of equipment was given a number, which appeared on its plant-ledger sheet. These numbers were then marked on the physical item itself, either by attachment of a numbered tag or by stenciled number.

The plant ledger was then complete and ready for operation.

The plant ledger is operated, and in all cases should be operated, by an employee who thoroughly understands the theory behind the practice. It is not work for an irresponsible, incompetent clerk who does not understand what he or she is doing. This observation is made because quite often, after a plant ledger has been installed, its operation is left to an employee as a spare-time job. The work is neglected, the ledger gets out of balance and it very easily becomes unmanageable and useless.

In proper operation of a plant ledger the sheets are filed, as mentioned before, by departments, subdivided according to estimated life, in a sturdy binder in a visible index form. The employee, in the present case, examines all invoices for account classification and keeps a running analysis of each year's capital addition. Periodically during the year new sheets are prepared and inserted in the binder for machines or equipment purchased.

At the end of each year, depreciation is computed on the basis of estimated remaining life and is entered on the sheets. When a sheet shows that an item is fully depreciated its treatment depends on whether or not the machine or equipment is in use. If not, then it is actually fully depreciated. The sheet is then removed from the plant ledger and the amount of the cost and the accrued depreciation are eliminated from the accounts in the general ledger. If, however, the item is still in use, the sheet is grouped with similar items in its department, as fully depreciated though still in use, and no elimination is made from the accounts in the general books.

With its plant ledger installed and in operation the corporation now has a complete, detailed inventory of its fixed assets.

An appraisal of its fixed assets, if desired, can be made more quickly, more accurately, and more economically.

In computing insurance coverage or proving a loss the company has specific records from which to work.

For purposes of establishing its depreciation deduction for federal income-tax purposes the company has complete, detailed and sound supporting data which can be easily summarized for presentation.

Should it be necessary to establish the investment in fixed assets, a complete, accurate record is at hand for that purpose.