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**INTEGRATED COST
AND
FINANCIAL ACCOUNTS**

INTEGRATED COST AND FINANCIAL ACCOUNTS

By

G. B. SOUSTER, A.C.W.A.

*First Placeman and S. Laurence Gill Prizeman
in the Final Examination of The Institute
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PREFACE

THE subject of integration has recently been engaging the attention of accountants in various parts of this country. Lectures given at several Branch meetings of the Institute of Cost and Works Accountants, and published or reviewed in recent issues of *The Cost Accountant*, have demonstrated the present concern of at least a sprinkling of industrial accountants at the fact that cost accounts and financial accounts should still be regarded as separate entities, not the unified entity they can so easily be.

When two railway coaches telescope together, something is almost bound to be thrown out ; and when two accounting systems—cost and financial—are telescoped together, something will *certainly* be thrown out. “ Throw out the obsolete, and do everything only once and only in the best way ”—that is what integration implies. And following integration will come economies, greater safety in the short-term data, better feeling in the accounts department, improved final accounts, and the end of the difficult, wasteful, too late to be useful, “ reconciliation of costing and financial results.”

The author believes that the integration which has come to some businesses is going to spread. More and more businesses will realize that they can have all the benefits of cost accounting *at practically no cost* if they integrate their accounts. We are probably, indeed, upon the verge of yet another revolution in accounting techniques, and soon industry may be chanting the funeral oration of that old, now obsolete companion, Historical Book-keeping.

It will be seen that this book is a small one, and its

object is simply to set out the principles and benefits of integration, and to illustrate their application with examples drawn from the more common kinds of circumstance met in industry. The book does not pretend to comprehend all possible circumstances; although some detail is given, particularly in Chapter III, the insistence is on principles, in the belief that accountants will readily adapt these to any cases not dealt with in these pages.

Besides being of use to accountants in industry, it is especially hoped that the book may be found to have useful formative qualities by candidates preparing for the Intermediate and Final Examinations of the Institute of Cost and Works Accountants.

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CHAPTER I

THEORY

INTEGRATED Accounting may be defined as a method of operating a set of accounts so that they perform every function, whether personal, financial, or costing, within the scope of a single trial balance.

The concept of integrated accounting thus contrasts with that of "separate cost accounts," which has characterized much costing thought where job, mass-production, or process costing methods were used. So far as overheads accounting is concerned, it may also usefully influence accounting systems where contract costing applies.

Advantages of Integration

Where integrated accounts are used, periodical (e.g., yearly) reconciliations between the cost and the financial accounts are obviated. Moreover, the possibilities of error in the shorter costing periods are decreased, since there is no longer an invitation to errors of omission in journalizing between the two sets of accounts: hence the information which is produced quickly and *is most likely to form the basis of action* tends to become more reliably based.

Further, economies in staff should in almost all cases be effected if separate accounts become integrated. Much duplication of analysis may be avoided if it is decided once and for all that certain expenses (e.g., overheads) are to be analysed in one way and one way only, and that the luxury of a separate analysis which simply

enables the final accounts to be produced in a set way (perhaps an ill-arranged way) is to be dispensed with entirely.

Growth of Separate Accounts

It is not difficult to comprehend the growth of separate cost and financial accounts, although a number of accountants are now freely coming to the view that this growth was mistaken. One has only to imagine a business regularly producing yearly "historical" accounts being faced with the need—whether for "cost plus" or sheer economic purposes is immaterial—of something more detailed, frequent, or positive. It is perhaps unthinkable that the time-honoured processes of historical book-keeping should be changed to meet the new demand; much more palatable—to the staff at least—that whatever new and untried thing is done should be done additionally, leaving the semi-sacred subsidiary books, ledgers, and final accounts undisturbed.

Admittedly, in a short space of time it may be found—by the cost accountant—that the subsidiary books could, from the costing viewpoint, usefully be modified; and some adjustments to the columnization of the cash books, purchase journal, and sales journal, for example, *may* be made in consequence. Nevertheless, although this "concession" may be won (perhaps with difficulty), it is less easy to conceive the expense accounts in the financial books being displaced by a very few controls, the treatment of stocks and purchases being considerably changed, or possibly very detailed job accounts being linked in some way to the financial nominal ledger.

The theory of integration challenges any position where only this intermediate stage has been reached: i.e., any system where there are a set of financial accounts and a set of cost accounts separately trial-balanced and each

producing its own profit and loss accounts. The challenge is based on the grounds of liability to error, unnecessary complication, and duplication of functions and personnel with their consequent increasing of office costs.

Theory of Integration

The theory of integration comprises four main principles—

1. If expenses are analysed in a highly detailed and prompt way by cost accounts, any analysis which is less detailed and less prompt should be ruled obsolete. Hence the expense side of any separate financial accounts which may exist becomes obsolete and should be removed from those accounts and replaced by the cost accounts.

2. Whatever changes this procedure may necessitate in the form of the final accounts cannot fail, if the cost accounts are properly classified, to lead to the final accounts themselves being properly classified.

3. Since direct expenses and overheads may be apportioned to departments and/or allocated to jobs, it may appear that for taxation purposes the final accounts will not be in a suitable form. This objection is fallacious, as a perfectly automatic solution is available.

4. Simplicity, economy, and safety can hardly fail to be more inherent in a set of integrated accounts than in separate sets of financial accounts and cost accounts running "parallel."

Nevertheless, certain problems may appear to attend the design and installation of an integrated system, and it is to a brief examination of those aspects which may seem problematical that most of this book will be devoted.

First, it will be desirable to examine the integrated nominal ledger, and to illustrate how it may contain a relatively small number of control accounts linking to a theoretically unlimited number of detailed accounts.

CHAPTER II

THE INTEGRATED NOMINAL LEDGER AND ASPECTS OF CONTROL ACCOUNTS

IN some ways a nominal ledger for integrated accounts should be smaller than one for separate financial accounts, viz. with regard to overheads accounting; and this is true even though the overheads accounting in the integrated accounts will probably greatly exceed in detail that which was performed by the old historical accounts.

Overheads Controls

The integrated accounts, since they are to perform, *inter alia*, all the costing functions, will probably be required to *classify* overheads in ways which will hardly have been done by the separate financial accounts, and it is this classification which facilitates the condensation of the overheads accounting in the new nominal ledger.

The question of the relative merits of differing classifications is outside the scope of this book, and of course will depend upon circumstances. For the purposes of illustration, however, it will be assumed that we are dealing with a factory, and that overheads are divided into the following groups in the cost accounts—

Works.

Selling and Distribution.

Administration.

Services. } All of which are apportioned
General. } to all the above.

It will also be assumed that there are a number of departments and that overheads are collected departmentally. Further divisions, e.g., into fixed, semi-variable,

and variable, may also be achieved, but it will be assumed that this has no effect upon the above groupings.

Since the expense portions of the integrated accounts are to be on costing lines, we shall make one further assumption, viz., that all overheads are coded, and that the coding is such as to distinguish at sight into which of the above classifications any coded item falls. Moreover, we shall assume that each department has a code, which is prefixed to the overheads code—thus overhead 201 in department 10A would be written 10A201.

Let us now repeat our list of groupings showing *control* code numbers and some specimen items within each group with their *detail* code numbers. We shall assume that works overheads may range from 201 to 299 and that the control number is 200 ; and so on—

- | | |
|--|--|
| 200. Works Overheads Control. | 201. Foremen and Chargehands. |
| | 202. Maintenance (Departmental). |
| | 203. Progress Clerks (Departmental). etc. |
| 300. Selling and Distribution Overheads Control. | 301. Advertising, Press. |
| | 302. Advertising, Circulars. |
| | 303. Carriage Out. etc. |
| 400. Administration Overheads Control. | 401. Bank Charges. |
| | 402. Directors' Expenses. |
| | 403. Directors' Fees. etc. |
| 500. Service Overheads Control. | 501. Accounts. |
| | 502. Supply. |
| | 503. Maintenance (H.Q.). etc. |
| 600. General Overheads Control. | 601. Rent. |
| | 602. Rates. |
| | 603. Electricity. etc. |

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The principle to be applied when integrating is simply that *the control accounts alone appear in the nominal ledger*. The detail accounts are in a separate ledger, a convenient form for which will usually be cards. This detail ledger shows not only each code, but also each department/each code in those cases where items are departmentalized. If it is desired to make the detail ledger self-contained, control accounts to correspond with those in the nominal ledger may also be included.

For the purposes of illustration, we shall now assume that cards are used for the detail ledger and that control cards are also maintained. The works overheads accounting will then commence in the manner set out below, and the other groups will be dealt with in a corresponding way—

| NOMINAL LEDGER | | DETAIL LEDGER |
|-------------------------------|---|--------------------------------------|
| 200. Works Overheads Control. | ☐ | 200. Works Overheads Control. |
| | ☐ | 201. Foremen and Chargehands. |
| | — | 10A201. |
| | — | 10B201. |
| | | etc. |
| | ☐ | 202. Maintenance (Departmental). |
| | — | 10A202. |
| | — | 10B202. |
| | | etc. |
| | ☐ | 203. Progress Clerks (Departmental). |
| | — | 10A203. |
| | — | 10B203. |
| | | etc. |

- ☐ = Group Control, agreeing to nominal ledger account.
☐ = Code Controls, together agreeing to relevant group control.
— = Departments/Code, together agreeing to relevant code control.

A little study of the above table, with due attention to the footnotes, will show that a card ledger balancing sectionally and sub-sectionally is linked to one nominal ledger account, and may be separately maintained by a clerk. This card ledger or its equivalent, however, probably existed in the separate cost accounts: what is new and significant is not the form of the detail ledger, but the fact that its control can become part of the integrated trial balance and replace perhaps a large number of (now obsolete) expense accounts. And this applies to each of the other controls 300 to 600.

In short, accounts with such names as Rent, Rates and Taxes, Insurances, Packing, Carriage Out, Discounts Allowed, Discounts Received, and a great many others, will disappear entirely from the nominal ledger as soon as integration takes place.

Suspense Accounts

Where short-term profit figures are produced, it becomes essential to provide in each short period—e.g., four weeks or calendar month—an equitable charge for those items which are paid only at longer intervals, or which are subject to seasonal fluctuations.

Among such items may be rent (or charge in lieu), rates, electricity, gas, water, holiday pay, insurances, and depreciation (all infrequently occurring and some seasonally fluctuating); and coal or coke (often seasonally fluctuating).

This necessity is usually answered by debiting the relevant expense accounts each costing period with the estimated proportions for the period, quite irrespective of whether the amounts have been brought into the books, and placing corresponding credits to a series of *suspense* accounts. When the amounts are actually paid, or brought into the purchase journal, they are debited to

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the suspense accounts, which thus at any period end, if provisions have been reasonably estimated, show the accrued liabilities (or prepayments) at that date.

The treatment of such accounts under integration is exactly parallel to that of the overheads accounts already illustrated. The integrated nominal ledger takes a suspense control account, and detail accounts are set up for each item.

For illustration, a code of 700 will be assumed for the group—

| NOMINAL LEDGER | | DETAIL LEDGER |
|------------------------|-------------------------------------|------------------------------------|
| 700. Suspense Control. | <input checked="" type="checkbox"/> | 700. Suspense Control. |
| | <input type="checkbox"/> | 701. Rent Suspense. |
| | <input type="checkbox"/> | 702. Rates Suspense. |
| | <input type="checkbox"/> | 703. Electricity Suspense. etc. |

It is to be noted that once a suspense procedure of this kind is carried out *within the integrated accounts*, no adjustments whatever need be made to the trial balance at the year end in respect of accruals or prepayments of the items so treated: the figures are automatically in the books before the trial balance is prepared.

Direct Costs

The general principle of control accounts within the integrated nominal ledger and detail accounts outside it, as described above in relation to overheads and suspense items, applies similarly to the integrated treatment of direct costs. Nevertheless, it may be less convenient to illustrate this treatment in relation to direct costs in a small book than to illustrate the treatment of overheads, due to the fact that cost accounts may tend to treat

direct costs in a greater variety of ways, depending upon the nature of the production and the consequent costing method used.

We shall therefore confine ourselves to a brief examination of the integration principle applied to direct costs where the following costing methods are used—

1. Output and process—illustrated by the output method.
2. Job and batch—illustrated by the job method.

Output Method. The output method of costing depends upon the relating of outputs in selected units of quantity to the costs incurred in achieving those outputs. Ranking as one of the simplest forms of cost preparation, it may be said to consist of three phases—

1. The measurement and recording of outputs, in which the money accounts take no part.
2. The measurement and recording of the costs relating to those outputs, which is the task of the money accounts.
3. The preparation of cost summaries which bring the two sets of information together for interpretation.

The direct costs which have to be measured will usually fall into two main headings—

1. Direct Labour.
2. Direct Materials.

Where several departments are concerned, each making distinct and separate outputs, it becomes necessary to measure each of the above headings departmentally. The book-keeping aspect of this is extremely simple.

Dealing first with direct labour, all that is necessary in the integrated nominal ledger is one direct labour control, to which is linked a detail (i.e. departmental) ledger somewhat analagous to that for overheads.

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Assuming direct labour to be coded 101, we should have the following arrangement—

| NOMINAL LEDGER | DETAIL LEDGER |
|-----------------------------|-------------------------------|
| 101. Direct Labour Control. | □ 101. Direct Labour Control. |
| | — 10A101. |
| | — 10B101. |
| | etc. |

The departmental direct labour costs are thus ready in the detail ledger to be related to the departmental outputs.

The treatment of direct materials, if they are separately issued to the various departments, is identical. Assuming only one class of direct material, with a code number of 102, we should have—

| NOMINAL LEDGER | DETAIL LEDGER |
|---------------------------------------|---|
| 102. Direct Materials Issued Control. | □ 102. Direct Materials Issued Control. |
| | — 10A102. |
| | — 10B102. |
| | etc. |

Provided that departmental overheads are arrived at, we have now complete departmental costs to be related to the output, the only proviso arising where work is in progress at either end of the costing period. Such work in progress will usually be treated at year ends by the old-fashioned "stock account" method; while for cost period purposes it may be treated statistically, i.e., shown in the cost summaries and short-term profit and loss accounts, but not posted in the books of account. More will be said of such work in progress in Chapter VI in connection with the preparation of short-term profit and loss accounts.

While the above remarks as to direct cost collection are applied to output costing, it will be appreciated that the treatment for process costing will be broadly parallel. Such additional problems as may arise, as partly finished work or by-products move from process to process through a number of departments, will be solved in the same way in the integrated accounts as they were in the separate cost accounts; the intelligent use of a control or controls simply being continued in the integrated nominal ledger instead of in the—now defunct—cost ledger.

Job Method. By the job method of costing, the unit of output becomes the particular job, or a section or sub-section thereof. The method is, of course, extremely common in engineering, while batch costing is simply a convenient application of it frequently used where repetitive work is carried on.

It will be clear that under this method the recording of *departmental* direct labour and direct materials issued is not alone sufficient, although it will normally be necessary to record at least the former for statistical and/or budgetary purposes and possibly for the allocation of overheads (if these are applied as a percentage of direct labour). Beyond this, it will also be necessary to record the direct labour and direct materials, and, in addition, any other direct expenses, relating to each individual job.

It is not proposed until Chapter III to make further reference to the recording of departmental direct costs in these circumstances, as this may usually be quite conveniently achieved by a method of statistical extraction.

The salient difference between job costing and output costing, from the book-keeping view-point, is simply that the departmental direct cost accounts disappear, their place being taken by a number of job accounts. These

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job accounts are in the first place debited with direct labour, direct materials issued, direct purchases, and any other direct expenses.

Thus, if separate cost accounts were being maintained, there would be a number—perhaps a large number—of detail accounts, each of which was collecting the cost of a job or section or sub-section of a job, the whole probably being comprised in a “job ledger” or “work in progress ledger,” and agreeing to a “work in progress control account” in the cost ledger.

Under integration, just as the detailed overheads ledger probably existed previously and continues to exist, so the work in progress ledger continues its existence, and no change need be made in it at least insofar as the accounts are or are not integrated. The work in progress control account, however, deprived of a home in the cost ledger, enters the nominal ledger in the integrated books.

| NOMINAL LEDGER | DETAIL LEDGER |
|---------------------------|-----------------------------|
| Work in Progress Control. | ☐ Work in Progress Control. |
| | — Job No. 2001. |
| | — Job No. 2002. |
| | etc. |

For the purposes of control, it will normally be desirable to maintain the work in progress control in analysed form, with a column for direct labour, one at least for direct materials issued, direct purchases, and direct expenses, and also one for allocated overheads (which will be discussed in Chapter IV).

Probable Position *Before* Integration

We have now seen that under the integrated system, the integrated nominal ledger contains, broadly, either a

direct labour and a direct materials issued control, or a work in progress control, and that these are commonly all it need contain in relation to direct costs.

In order fully to appreciate the effects of integration on the former *financial* nominal ledger, it may be interesting to examine exactly how the financial ledger formerly dealt with such costs.

As to labour, it is probably fair to assume that there was something purporting to resemble the direct labour account, but if this was so—

(a) It is likely that it contained debits for some indirect labour, too. It may simply have been a "factory wages account," honoured by time, but quite unavailing from the viewpoint of precise control, neither giving true direct labour nor leaving the overheads accounts with the full story; indeed, doing nothing but provide a somewhat anomalous figure for the yearly accounts;

(b) If it gave true direct labour, but job costing applied, then it was still insufficiently detailed to be of use under those conditions; or

(c) If it gave true direct labour and output costing was used, then it was an exact duplication of the direct labour control in the separate cost accounts, and therefore one of the two accounts was unnecessary.

Next, as to materials issued, it is probable that this term did not exist at all within the realms of the historical accounts, but belonged exclusively to the separate cost accounts. In the financial accounts would probably be found simply a "*purchases* account" (adjusted at each year end by an entry in a stock account), and most accountants will be familiar with the chaos which such an account may commonly comprise. To it will commonly be debited—

- (a) Raw materials bought for store.
- (b) Finished parts bought for store (in applicable cases).
- (c) Materials or parts bought for specific jobs.
- (d) Quite probably a variety of other purchases properly belonging to overheads accounts.

If such an account existed (and it is an all too common one) it is clear that it could be of little practical value.

In short, if we think back upon the materials issued control account, or the corresponding column of the work in progress control account, described above, we shall now realize that we are very far indeed from finding its equivalent in the financial nominal ledger. It will therefore be interesting to review the steps by which we arrive at having in the integrated nominal ledger such an account or such a column, and for this purpose we shall now consider the integrated treatment of purchases and stores.

Purchases, and Stores Controls

Like the treatment of overheads and direct costs, the treatment of purchases and stores in integrated accounts resembles that in separate cost accounts. One salient difference may arise in connection with policy reserves which reduce the stores valuations from "cost" to "balance sheet" prices, but this matter is outside the scope of the present chapter and will be given special attention in Chapter VII. For the moment, we shall be content with considering the accounting treatment when supplies are received and suppliers' invoices entered in the books and when materials are later issued, assuming throughout that all entries and balances are "at cost."

Reference has been made above to the purchases account which is a common feature of books of historical account, and it has already been said that it may commonly contain a rather ill-assorted motley of items.

On the other hand, the treatment of these items in separate cost accounts has to be much more precise, practical, and dynamic.

When the two sets of accounts are integrated, the integrated accounts take over this dynamic treatment, while the old purchases account is discarded. Items which are bought for store are debited to stores control accounts; those bought directly for specific jobs are debited to work in progress control; while any which are properly overheads are debited to the relevant overheads controls. In each case detail debits are made to the relevant accounts outside the integrated nominal ledger (those for stores being to the relevant stores ledgers), the whole series of entries being demonstrable thus—

| TYPE OF PURCHASE | NOMINAL LEDGER | DETAIL LEDGER |
|--------------------------|---|---|
| Parts for specific jobs. | <i>Dr.</i> Work in Progress Control. | <i>Dr.</i> Specific Job Accounts in Work in Progress Ledger. |
| Items for stores. | <i>Dr.</i> Relevant Stores Controls. | <i>Dr.</i> Relevant Stores Accounts in Stores Ledger. |
| Overheads items. | <i>Dr.</i> Relevant Overheads Controls. | <i>Dr.</i> Relevant Overheads and Department /Overheads Accounts in Overheads Ledger. |

When goods are *issued* from store, the dynamic treatment will continue, and may be exemplified thus—

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| TYPE OF COSTING | NOMINAL LEDGER | DETAIL LEDGER |
|-----------------|--------------------------------------|--|
| Output (q.v.). | <i>Dr.</i> Materials Issued Control. | <i>Dr.</i> Department/Materials Issued Accounts. |
| Job. (q.v.). | <i>Dr.</i> Work in Progress Control | <i>Dr.</i> Specific Job Accounts in Work in Progress Ledger. |
| Both | <i>Cr.</i> Relevant Stores Controls. | <i>Cr.</i> Relevant Stores Accounts in Stores Ledger. |

It will be appreciated that this treatment reflects the expense element only when that element applies, e.g. upon the *issue* of stores, and that it is only an ordinary application of costing principles. Nevertheless, it is now carried out in the integrated books, and the bogey of a purchases account has vanished entirely: the integrated accounts now reflect expenditure as it becomes significant and the way in which it becomes significant.

Readers should note that the stores ledger referred to above is, of course, that ledger which existed under separate cost accounting, and does not change its form on account of the integration. It shows running balances of each stores item on the perpetual inventory system. If it contains extensions as well as prices, it should be directly reconcilable to the relevant stores controls in the integrated nominal ledger. If, as is usually to be desired, it contains prices only, it should be reconcilable to the stores controls by transcription and extension.

Example of an Integrated Nominal Ledger

The chart given on page 17 exemplifies an integrated nominal ledger and shows—

COMPARISON OF NOMINAL LEDGERS

| FINANCIAL NOMINAL LEDGER | DETAIL ACCOUNTS | | INTEGRATED NOMINAL LEDGER | DETAIL ACCOUNTS |
|--|--------------------|------------------------|---|---|
| Capital. Debentures. General Reserve. Appropriation. Income Tax. Creditors' Ledger Control = Creditors' Ledger. P.A.Y.E. Buildings. Plant = Plant Inventory (if kept). Debtors' Ledger Control = Debtors' Ledger. Wages Control. | | NO CHANGE | Capital. Debentures. General Reserve. Appropriation. Income Tax. Creditors' Ledger Control = Creditors' Ledger. P.A.Y.E. Buildings. Plant = Plant Inventory (if kept). Debtors' Ledger Control = Debtors' Ledger. Wages Control | |
| Stocks. Purchases. Direct Wages. Foremen, Chargehands. Drawing Office. Planning. Progress. Shop Clerks. Buildings Repairs. Plant Repairs and Renewals. Advertising. Commissions. Discounts Allowed. Directors' Fees. Discounts Received. Stationery. Accounts. Rates. Electricity. Etc. None of these accounts being departmentalized. Sales. | | EX COST ACCOUNTS | Raw Materials = Raw Materials Stores Control Stores Ledger. Maintenance = Maintenance Stores Control Stores Ledger. Work in Progress = Job Ledger. Control. Works Overheads = Works Overheads Control. Ledger. Selling and Dis- = Selling and Dis- tribution O'heads tribution O'heads Control. Ledger. Administration = Administration O'heads Control O'heads Ledger. Service O'heads = Service O'heads Control. Ledger. General O'heads = General O'heads Control. Ledger. Suspense Control. = Suspense Ledger. | |
| | OBSOLETE | | | All these accounts being department- alized where necessary. |
| | | | Trading. | |

(a) Comparison with the former financial nominal ledger.

(b) Links between nominal ledger controls and detail accounts.

The ledgers illustrated purport to be simply examples, and for this purpose a specific case is assumed. In particular, job costing is assumed. Sundry asset and liability accounts are included, together with certain controls which also existed in the financial nominal ledger, from which it will be noted that the principle by which the new controls and detail accounts are linked already existed in the old accounts, in the case supposed, in relation to personal matters.

A wages control account, via which all wages debits proceed to their destinations, is assumed to have existed in the old accounts and, of course, is increasingly convenient in the new. Finally, the sales account in the old ledger is called the trading account in the new, for reasons which will be discussed later.

CHAPTER III

WAGES ANALYSIS AND SUBSIDIARY BOOKS

CHAPTER II has set out briefly the effects of integration on the nominal ledger, and it will have been seen that these included a probably considerable reduction in the size of this ledger and hence in its demands upon the skilled time of the accountant. This will usually be so even where there have been no cost accounts whatever in the past: i.e., *the nominal ledger work will be less with cost accounting than without it*. Still greater, however, will be the comparative saving in time where there have been two separate sets of accounts, for then it will be a case not only of the nominal ledger's decreasing in size, but also of the disappearance of the cost ledger.

Nevertheless, although the time-saving in nominal ledger work is considerable, it will generally be found that still greater economies accrue from integration in respect of the analysis of wages and the subsidiary books. At the best, running subsidiary books to meet the demands of two entirely different ledgers (financial nominal, and cost) can rarely be a very economical or a very safe proposition. The books must be designed to meet the requirements of one particular method of analysis, and since the old historical method differs fundamentally from the dynamic cost method, it follows that the subsidiary books can rarely hope to satisfy both. Furthermore, the clerks entering those subsidiary books, in being accountable to two controllers—the financial accountant and the cost accountant—are apt to find the work more bewildering than it need be, and it is probably true to

say that the "integrated" office tends to be a happier as well as a more efficient one than the "separate accounts" office.

Using Financial Subsidiary Books for Cost Accounts

Where separate cost and financial accounts are operated, the subsidiary books in use will normally have been designed to meet the financial requirements only. We shall shortly realize the interesting fact that such financial subsidiary books, although performing to less advantage, usually tend to be bulkier, i.e. require more columns, than subsidiary books for an integrated system. Further, posting from financial subsidiary books may often be more complex.

Over-riding these considerations, however, is the problem of how the cost accountant is to obtain his data from these books. They are not in the right form for him; they contain much that has nothing to do with the cost accounts, yet which may be mixed up (e.g. in a "sundries" column) with that which does concern him: and this mixture of the "cost" and the "non-cost" is a constant source of danger to the accuracy of the short-period returns—the returns upon which action may be based.

Let us then, for a moment, consider the cost accountant's problem. He takes a financial subsidiary book in order to extract from it the cost accounting data. This he may do either by posting directly from the subsidiary books to his cost accounts (in which case he must mark the book with a second set of folio numbers, and by which method he may find it extremely difficult to extract his control account totals), or by summarizing the costing items in a working sheet and journalizing through the cost journal. Either way, it is clear, the invitation to errors is not escaped.

Further, he has to solve the problem of wages analysis, and this will probably involve much more detail than some of the subsidiary books, since the items will normally require a larger degree of departmentalization and possibly, dependent upon the costing method, job coding. In this case, therefore, he may have no alternative but to disregard entirely what has been done for the financial accounts and re-analyse the wages completely.

Again, he must properly analyse material issues. This, however, may not have been done at all for the financial accounts, in which case no comparison of procedure arises.

Having briefly outlined the above aspects of expense analysis for separate cost and financial accounts, we shall now examine each of these aspects in more detail, showing the solutions readily, and indeed automatically, provided by integration.

Wages and Salaries Analysis

While the degree of analysis given to wages and salaries by separate financial accounts may vary between individual cases, it is a general truth that this degree is very much less than that usually given by cost accounts. If the financial accounts gave the same detail as the cost accounts, there would, of course, be no point in duplicating that detail in the cost accounts—in short, integration, so far as wages were concerned, would be almost a *fait accompli*.

The actual machinery for analysing wages and salaries may also vary between different cases. If punched-card accounting is used, for example, the full cost accounting analysis should be readily available, and if the financial accounts differ in their treatment it will probably be simply by consolidating totals provided by the tabulator ; e.g. all factory wages may be treated as such, whereas in the cost accounts they will be debited to

departments, processes, or jobs (direct wages), to overheads codes (indirect wages), and to suspense (holiday pay).

We have already seen that accounts of such unsatisfactory content as "factory wages" disappear entirely from the nominal ledger upon integration. It follows that the consolidation of the machine tabulations to feed such accounts ceases when the accounts are integrated.

Somewhat analogous results will accrue from integration in those probably far more numerous cases where punched cards are not used; i.e., it will be found that the wages analysis carried out for the financial accounts can be dispensed with entirely, that performed for the cost accounts simply replacing it.

We may summarize the benefit with the following diagram—

WAGES ANALYSIS

| | |
|--|---------------------------------|
| <p style="text-align: center;"><i>Financial</i></p> <p>Synthesize into totals for somewhat anomalous expense accounts.</p> | <p><i>CANCELLED</i></p> |
| <p style="text-align: center;"><i>Costing</i></p> <p>Analyse by jobs, processes, etc., and department / overheads codes, arranging control totals.</p> | <p><i>CONTINUE</i></p> |
| <p>For Separate Accounts.</p> | <p>For Integrated Accounts.</p> |

A word may be added at this point concerning the treatment of holiday pay. We have seen in Chapter II that this should be treated in the cost accounts, and therefore in the integrated accounts, as a suspense item.

It follows that provisions will be made each period, and when the holiday pay is actually paid it will be debited to the suspense account. In separate financial accounts it frequently happens that such holiday pay is debited to the same expense accounts as those to which ordinary (or "worked for") pay is debited; and this is one of the commonest vitiating factors in the story told by a financial account which purports to contain only "direct wages." This factor is, of course, dispelled by integration.

It will generally be propitious to use a wages and salaries control account in the integrated accounts as it probably was even in the separate financial accounts. All gross wages will be passed through this account, which will therefore give a ready proof that the correct *total* gross wages, at least, have been debited out to the various expense (and, in applicable weeks, suspense) accounts. The entries may be illustrated in journal form, with imaginary figures, thus—

| | £ | s. | d. | £ | s. | d. |
|---------------------------------------|-------|----|----|-------|----|----|
| Wages and Salaries Control <i>Dr.</i> | 4,420 | 2 | 0 | | | |
| To Cash | | | | 3,818 | 4 | 0 |
| „ Deductions (Detailed) | | | | 601 | 18 | 0 |
| Work in Progress <i>Dr.</i> | 2,953 | 1 | 0 | | | |
| Overheads Controls (Detailed),, | 1,118 | 1 | 0 | | | |
| Suspense Control | 349 | 0 | 0 | | | |
| To Wages and Salaries Control | | | | 4,420 | 2 | 0 |

The wages and salaries will normally first be collected departmentally, e.g. from the payrolls, and a summary prepared in this form may provide—

(a) Departmental totals for basing overheads rates

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where these are expressed as a percentage of departmental direct labour.

(b) Departmental totals from which to calculate and apportion the holiday pay provisions necessary for the period.

The summary will then be switched round into costing form for arranging debits to direct and indirect expense

SPECIMEN WAGES DOCKET

| | | | | | | | | | | | | | |
|-------------------------------|--|-------|--|--|-------|--|--|-------|--|--|--|--|--|
| Dept. Wk. ended | Job or Code No..... | | | | | | | | | | | | |
| Hours..... | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Basic</td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> <tr> <td style="text-align: center;">Bonus</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">TOTAL</td> <td></td> <td></td> </tr> <tr> <td colspan="3" style="border-top: 3px double black;"></td> </tr> </table> | Basic | | | Bonus | | | TOTAL | | | | | |
| Basic | | | | | | | | | | | | | |
| Bonus | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Hours is optional. The docket may be varied to suit individual requirements.

accounts, both detail and control. If punched cards are not used, it will commonly be found that a docketing system is very convenient, since this gives a flexibility which enables the summary to be switched round from departmental to costing form quite simply.

To illustrate this method, specimen forms are shown as follows—

(a) *A wages docket* (above), which is prepared either

SPECIMEN DEPARTMENTAL WAGES AND SALARIES SUMMARY

| WEEKLY DEPARTMENTAL WAGES AND SALARIES | | | | | | | | | |
|--|--------|------|----|----------------------------|------|---|-------------|------|---|
| Week ended . 29/4/ | | | | | | | | | |
| Department Code | Direct | | | Indirect excl. Holiday Pay | | | Holiday Pay | | |
| | 10A | 82 | 10 | 3 | 5 | 2 | 9 | | |
| 10B | 61 | 4 | 11 | 4 | 19 | 6 | | | |
| 10C | 121 | - | 4 | 9 | 3 | 2 | | | |
| | | | | | | | | | |
| etc. | | etc. | | | etc. | | | etc. | |
| <hr/> | | | | | | | | | |
| 14D | | | | 27 | 2 | 9 | 3 | 1 | 2 |
| TOTALS (£1,064 1 7) | £763 | 8 | 2 | £293 | 7 | 1 | £7 | 6 | 4 |

Each line must agree with the departmental payroll.
 The total must agree with the gross wages total for the week.

direct from the payroll or from the job tickets or time sheets, etc., for the department.

(b) *A weekly departmental summary* (page 25), on which the docket, being retained in departmental order, are entered departmentally. It will be seen that direct wages are shown separately, so that even where direct wages are later split to a number of job accounts, the departmental direct figure is still available and may be extracted* to a summary for each cost period. It will also be seen that holiday pay is given a separate column. This is simply to leave it quite clear how much "worked for" wages have been paid in each department, so that total "worked for" wages in each period may be readily extracted departmentally and used as a basis for holiday pay provisions and apportionments for the period.

(c) *A weekly cost summary* (page 27), to prepare which the docket are sorted into costing form grouped under control accounts.

For the purposes of illustration, the same codings are assumed as appeared in Chapter II, while full posting instructions are noted below the specimen summary on page 27.

SPECIMEN COST WAGES AND SALARIES SUMMARY

| WEEKLY WAGES AND SALARIES COST SUMMARY | | | | | | | |
|--|-----------------|-------------|-------------|---|----------------|-------------|---|
| Week ended..... 29/4/..... | | | | | | | |
| Control | Job or Code No. | Code Totals | | | Control Totals | | |
| <i>Work in Progress</i> | * | | | | £763 | 8. | 2 |
| 200 | † 201 | 49 | 7 | 6 | | | |
| | † 202 | 27 | 3. | 6 | | | |
| | <i>etc.</i> | | <i>etc.</i> | | 118 | 6 | 2 |
| 300 | † 302 | 43 | 2 | 9 | | | |
| <i>etc.</i> | <i>etc.</i> | | <i>etc.</i> | | | <i>etc.</i> | |
| | | | | | | | |
| 700 | 706 | £7 | 6 | 4 | £7 | 6 | 4 |
| TOTAL | | | | | £1,064 | 1 | 7 |

*Postings to job accounts may be direct from dockets or may be listed on the cost summary, whichever is more convenient.

†Only code totals need be shown on the summary. It will normally be convenient to make department/code postings direct from dockets.

Notes.—

1. Postings to the control accounts in the *detail* ledgers should be made direct from the control totals column.

2. Postings to control accounts in the *nominal* ledger may be journalized once per period.

National Insurance

Just as gross wages and salaries may be passed through a control account, so it will usually be found convenient to use a control for the employer's contributions to National Insurance.

A simple summary, one per cost period, will usually suffice to collect the analysis figures required at the end of the period. This summary may consist of one column for each pay week, in which the departmental totals are entered. At the end of the period it is simply cross-added and cross-balanced, the grand total being credited to the control and debits being made to each department. As some of these debits will normally relate to works, some to selling and distribution, some to administration, and some to services, the departments may be arranged in this order, and the columns ruled off to show each of the control totals required. The completed summary then gives (in the total column) all the figures required for posting nominal ledger controls and detail ledger controls, code accounts, and department/code accounts.

A specimen ruling for an assumed four weeks period is shown on page 29.

Stores Issues

Due to the fact that separate financial accounts will usually ignore stores issues throughout the year, making an over-all adjustment at the end of the year by a debit to a "stock account," the introduction of an accounting procedure for stores issues in the integrated books does not, like the wages procedure described above, usually replace a less detailed but crudely analogous method in the old historical accounts.

No time-saving can therefore be claimed for this aspect of integration, and to this extent it is probably unique among the integration changes.

SPECIMEN NATIONAL INSURANCE (EMPLOYER'S CONTRIBUTIONS) SUMMARY FOR COST PERIOD

| NATIONAL INSURANCE (EMPLOYER'S CONTRIBUTIONS) | | | | | | | | | | | |
|---|-----|--|-----|--|-----|--|-----|--|---------------|--|--|
| Summary for Period ended..... | | | | | | | | | | | |
| Department | W/e | | W/e | | W/e | | W/e | | Period Totals | | |
| <i>10A</i> | | | | | | | | | | | |
| <i>10B</i> | | | | | | | | | | | |
| <i>etc.</i> | | | | | | | | | | | |
| WORKS TOTAL | | | | | | | | | | | |
| <i>13A</i> | | | | | | | | | | | |
| <i>etc.</i> | | | | | | | | | | | |
| S AND D TOTAL | | | | | | | | | | | |
| | | | | | | | | | | | |
| <i>etc.</i> | | | | | | | | | | | |
| GRAND TOTAL | | | | | | | | | | | |

Method of Use.— Insert relevant amounts for each week using one column per week and agreeing to the week's total employer's contributions.
 Cross-add and cross-balance at end of period : only the " period totals " column gives rise to postings.

On the other hand, the introduction of stores issues accounting to the integrated accounts does bear one direct resemblance to the changes relating to wages and, as we shall see later in this chapter, to the subsidiary books, viz. it is still true that what was done in the separate cost accounts can now be done in an almost identical way, or to an identical end, in the integrated accounts.

Whatever requisitioning procedure was carried out for the separate cost accounts will continue after integration. The pricing of issues will similarly continue without change, whether, for instance, average, first in first out, or last in first out. Any changes which may be made to the pricing method are an entirely separate matter and have nothing to do with the integration: on the other hand, freedom to make such changes is in no degree changed by integration.

Certain special problems as to balance sheet valuations which arise only upon integration will be dealt with in Chapter VII and in no way affect the day-to-day issuing and accounting routine.

The sorting and summarizing of issue requisitions will similarly go on without change. The costing summaries may quote job numbers, etc., or simply a work in progress, etc., control total (with detail postings direct from requisitions), according to individual circumstances. They will also quote overheads code numbers and show overheads control totals. The requisitions will also be sorted by stores accounts, and control totals (e.g. raw materials stores control, bought-out parts stores control, maintenance stores control, etc., according to individual circumstances) will be available on a second summary, agreeing in total with the first. Enlarging upon the outline illustration given in Chapter II (page 16), we may

illustrate the accounting entries thus, using imaginary figures—

| | | £ | s. | d. | £ | s. | d. |
|-----------------------------------|------------|--------|----|----|-----|-------|--------|
| Work in Progress Control | <i>Dr.</i> | *6,119 | 8 | 4§ | | | |
| 200. | <i>Dr.</i> | | | | | | |
| 10A202 | | £24 | 7 | 3† | | | |
| 11B202 | | 31 | 2 | 0† | £55 | 9 | 3‡ |
| | | <hr/> | | | | | |
| 10C207 | | 10 | 7† | | 10 | 7‡ | |
| | | <hr/> | | | 55 | 19 | 10§ |
| 300. | <i>Dr.</i> | | | | | | |
| 14B307 | | | 9 | 9† | | | |
| 14C307 | | | 1 | 4† | 11 | 1‡ | § |
| | | <hr/> | | | | | |
| To Raw Materials Stores Control | | | | | | 5,010 | 2 2§ |
| „ Bought Out Parts Stores Control | | | | | | 1,109 | 6 2§ |
| „ Maintenance Stores Control | | | | | | 56 | 10 11§ |

* Job, etc., accounts may be shown in detail on the summary or on a supporting schedule, or it may in some cases be convenient to make such postings direct from requisitions.

† = Dept./Code posting ‡ = Code posting.

§ = Control posting.

Journal entries of this kind may be passed through the ordinary journal (showing control totals only, and cross-referencing to the more detailed summaries), or through a special materials issued journal. The latter may be

suitably arranged so that all job, etc., department/overhead, overhead code, and control totals are immediately visible on the debit side, while the credit side shows simply control totals, detail credits to the stores ledger having already been made direct from the requisitions.

Purchase Journal

The differences between a purchase journal for separate financial accounts and one for integrated accounts are as follows—

1. The financial book is probably feeding accounts which are simply historical, the integrated book accounts which are dynamic, and the two books will reflect this difference clearly.

2. Although the integrated book serves a more useful purpose, it will usually be smaller and almost invariably neater in design.

3. The purchase journal clerk for an integrated book will normally work to the expense code, the corresponding clerk for a financial book normally will not.

One of the commonest titles for an analysis column in a purchase journal feeding historical accounts is "purchases," or "purchases—general," a vague term with which we have already come in contact, as the name of an account in Chapter II. In that chapter we saw that this account was dispensed with upon integration, being principally replaced by stores control accounts, although some of its items may properly have belonged to work in progress or overheads, to which extent the control accounts for these also share in the displacement.

In a corresponding way, there being new controls, but no purchases account, to feed, new control columns appear in the integrated purchase journal, while the purchases column does not.

A further change is apparent. Since a few overheads

controls replace a number of overheads accounts, that part of the purchase journal which formerly fed those overheads accounts is now condensed to feed only the few overheads controls, with beneficial results as to conciseness, neatness, and, even, flexibility.

Since, however, the new overheads columns have to feed not simply the overheads controls, but also the corresponding detail ledgers, some device has to be found to enable them to perform this latter function as well. Where goods received notes showing the chargeable accounts are in use, it will commonly be practicable to tie these up to the respective control columns, posting controls from the column totals, and detail accounts from the goods received notes, which, of course, are agreed to the respective column totals first.

In many cases, however—particularly in medium-sized businesses—no copy of the goods received note may be routed to the accounts department for this purpose. In such cases the requirements of the detail accounts can be met by providing “code” columns in the purchase journal, the overheads code being inserted therein, and the control total at the end of the period being dissected below the ruling-off by reference back to the code numbers so inserted. The work in progress column, if there is one, may be treated similarly. Detail postings to the *stores* ledgers must, of course, almost invariably be done from goods received notes or equivalent documents.

We shall now illustrate by way of contrast an imaginary purchase journal for separate financial accounts and a corresponding book for the same accounts when integrated. Where purchases are not treated in book form at all, but by machine listing or punched cards, equivalent alterations to the listing or punching will of course be made. The codings so far assumed continue to be used in the illustrations (on pages 34 and 35).

PURCHASE
(for separate

| Date | Supplier | Fol. | TOTAL | Pur- chases— General | Rent, Rates & Taxes | Heat, Light & Power | Sub- scrip- tions | Station- ery | Adver- tising |
|------|----------|------|-------|----------------------------|---------------------------|---------------------------|-------------------------|-----------------|------------------|
| | | | | | | | | | |
| | | | | | | | | | |

Notes —

1. There is no attempt at grouping—selling and distribution, services, administration, general, and suspense items are shown in no proper arrangement. To obtain control totals, the cost accountant must entirely rearrange.

2. Lack of width has forced two columns each to be used for more than one item, so that these columns must be re-scrutinized by the cost accountant.

3. "Purchases—general" may contain stores items, direct

THE SAME
(for integrated

| Date | Supplier | Fol. | Total | Raw Material Stores Control | Bought Out Stores Control | Work in Progress | 200. | |
|------|----------|------|-------|--------------------------------------|------------------------------------|---------------------|------------|---------------|
| | | | | | | | Job No. | Works Code |
| | | | | | | | | |

Notes—

1. This book will feed the integrated nominal ledger *and* all the detail ledgers except stores ledgers, which are posted from goods received notes.

2. The book gives instant information.

JOURNAL
financial accounts)

| Main-tenance | Tele-phones | Welfare | Cleaning | Insur-ances | Packing Materials | Sundry Expenses | Capital | Other Items |
|--------------|-------------|---------|----------|-------------|-------------------|-----------------|---------|-------------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

purchases, and even an odd overheads item, and must be completely analysed before the cost accounts can be posted.

4. "Sundry expenses" is suspect: so is "other items." Cost and non-cost items may be mixed and the danger of errors of omission is particularly applicable here.

5. Does the cost accountant agree that what has been capitalized should have been capitalized, or, for that matter, *vice-versa* ?

6. Fifteen analysis columns.

PURCHASE JOURNAL
accounts)

| OVERHEADS CONTROLS | | | | 700. Suspense Control | Capital | Other Items |
|-------------------------|----------------------------|-------------------------|-------------------------|-----------------------------|---------|----------------|
| 300. S. & D. Code | 400. Admin't'n. Code | 500. Service Code | 600. General Code | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

3. "Other items" is strictly used only for anomalous items which do not fall under other heads, e.g. appropriation items such as Schedule D Tax.

4. Eleven analysis columns.

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Finally, we shall illustrate the dissection of a coded column as it would appear at the end of a period. For illustration purposes, the figures throughout the period, which will be scattered down the column, are shown consolidated as though they appeared consecutively: the 500 (service overhead) column is shown.

COLUMN DISSECTION AT END OF PERIOD

| | £ | s. | d | |
|---------|----|----|----|--|
| 553 | 10 | 0 | 0 | } Entries spread through the period. |
| 561 | 2 | 9 | 7 | |
| 554 | 1 | 8 | 4 | |
| 558 | 22 | 1 | 11 | |
| 553 | 1 | 9 | 2 | |
| 554 | 6 | 7 | 6 | |
| 562 | 4 | 3 | 3 | |
| 554 | 39 | 7 | 7 | |
| £87 7 4 | | | | Period total for 500 Controls in nominal and detail ledgers. |

| | | | | |
|---------|----|----|----|---|
| | £ | s. | d | |
| 553 | 11 | 9 | 2 | } Code totals for code accounts in detail ledger. |
| 554 | 47 | 3 | 5 | |
| 558 | 22 | 1 | 11 | |
| 561 | 2 | 9 | 7 | |
| 562 | 4 | 3 | 3 | |
| £87 7 4 | | | | Proof of dissection, ensuring agreement of 500 code accounts to 500 control in detail ledger. |

Cash Book

Those changes which we have seen occur, upon integration, in the purchase journal, are accompanied by

corresponding changes in the cash book. Since both books are redesigned to meet the demands of the same alterations to the nominal ledger, it follows that identical principles will apply in both cases.

The only apparent difference is that more of the original cash book columns will tend to survive the integration changes, these including the columns relating to the personal ledgers (sales and purchases) including the discount columns, and, also, those carrying the debits for wages and salaries and National Insurance controls, and those effecting the credits to deductions from wages accounts if the *gross* amount of wages and salaries is entered on the credit side. Any columns which formerly related to expenses (other than wages and salaries and National Insurance) will, however, be modified into overheads controls, etc., with code columns provided as necessary.

It will generally be found that the *debit* side of the cash book (or the debit cash book, where separate debit and credit books are used) changes very little upon integration. Indeed, it is quite possible that there will be no changes at all, especially in those cases where there are extremely few cash receipts which require crediting to overheads. In such cases—for example, where there are only one or two such items a week—it will probably not be worth while to provide overheads and suspense columns to the number of, say, six; one column with an inset code column may comfortably carry all the items, and postings to both control and detail accounts still be done quite conveniently. In view of these aspects, nothing further will be said of the debit side of the cash book, nor will this be illustrated.

As to the credit side, an imaginary credit cash book for separate financial accounts, together with the corresponding book for integrated accounts, will now be shown.

CREDIT
(for separate)

| Date | Details | Fol. | Creditors' Ledger | | | | Bank | Wages and Salaries | Nat. Insur. (Em- ployer's) | Travel- ling |
|------|---------|------|-------------------|------|--|--|------|--------------------|-------------------------------|-----------------|
| | | | Dis- counts | Cash | | | | | | |
| | | | | | | | | | | |

Notes—

1. There is no attempt at grouping. The cost accountant must entirely rearrange the expense columns.

THE SAME
(for integrated)

| Date | Details | Fol. | Creditors' Ledger | | Bank | Wages and Salaries Control | Nat. Ins. Control (Em- ployer's) |
|------|---------|------|----------------------------|-----------------|------|----------------------------|-------------------------------------|
| | | | Dis- counts Received | Cheques etc. | | | |
| | | | | | | | |

Notes—

1. It is assumed that few 200 and 600 items pass through the cash book ; therefore one column can suffice for both without inconvenience at the posting stage.

CASH BOOK
financial accounts)

| Welfare | | Post-ages | | Subscriptions | | Commissions | | Directors' Fees | | Canteen | | Sundry Expenses | | Other Items | | TOTAL | |
|---------|--|-----------|--|---------------|--|-------------|--|-----------------|--|---------|--|-----------------|--|-------------|--|-------|--|
| | | | | | | | | | | | | | | | | | |

2. "Other items" is suspect: so may "sundry expenses" be.

3. Fourteen analysis columns.

CREDIT CASH BOOK
accounts)

| OVERHEADS CONTROLS | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|--|--|--------------|--|--|--|---------------------|--|--|--|--------------|--|--|--|-----------------------|--|-------------|--|--------|--|
| 200 and 600. Work and General | | | | 300. S. & D. | | | | 400. Administration | | | | 500. Service | | | | 700. Suspense Control | | Other items | | TOTAL. | |
| Code | | | | Code | | | | Code | | | | Code | | | | Code | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

2. "Other items" is strictly used only for anomalous items which do not fall under other heads: e.g. closing balance, and appropriation items such as dividend payments.

3. Eleven analysis columns.

The same codings as have previously been assumed will continue to be used, and it will be seen that the redesigning of the book has no effect but to enable it to feed the new control accounts which have replaced the numerous individual expense headings in the nominal ledger. The present cash book is not of the bank cash book type, i.e. it is assumed that payments in cash, as distinct from cheques, are made from the main cash as well as from petty cash. This matter, however, is quite apart from the subject of integration, and freedom as to the choice of cash systems is neither greater nor less, i.e. is in no way affected, by integration of the accounts (pages 38 and 39).

At the end of the cost period dissections of the coded columns may be carried out below the totals in the same way as shown for the purchase journal on page 36. In addition, it must be remembered that the discount columns require picking up. In the credit cash book shown, the discounts received total may be carried to the foot of the 400 column (assuming discounts received are treated as administration expense credits) and deducted from the dissection, or separate postings to controls (nominal ledger and detail ledger) and code account may be made direct from the foot of the discounts column itself. As the amount must also be debited (to the creditors' ledger control), it may be preferred, and found simpler, to make the expense postings separately.

Petty Cash Book

There is probably no subsidiary book simpler to rearrange for integration than the petty cash book. Most of the items will normally fall within the overheads controls, and a sundries column may be provided to carry any which do not (e.g. closing balance). The integrated petty cash book should be an extremely

simple one, and where a number of individual expense columns have previously been provided to suit the separate financial accounts, a further welcome reduction in column usage should accrue (see pages 42 and 43). Dissections will be used at the foot of each code column as illustrated on page 36.

Sales Journal

The form of the integrated sales journal will depend on a variety of circumstances, including the requirements of the business and whether machine posting with prelists, or punched cards, are used. Such analysis as may be necessary may include the following—

1. Analysis by type of product or by productive department.
2. Analysis by areas in which sold.
3. Analysis by agents, travellers, depots, etc.

This analysis may or may not have been carried out in the financial accounts.

The rearrangements necessary upon integration clearly involve a wide variety of possibilities but no untoward difficulties. If more than one of the above types of analysis is required, e.g. if (3) had been performed by the separate financial accounts and (1) by the separate cost accounts, the primary analysis (e.g. that required to coincide with the sales ledger sections) may be carried out in the subsidiary book or prelist, and the secondary by an abstract reconciling thereto. Where prelists are used for machine posting they may be prepared both ways and reconciled: where punched cards are used, it will simply be a question of two sortings and tabulations.

At the most, nothing more can be involved than was already performed under the separate accounting arrangements.

Journal

We have now reviewed most of the common subsidiary books and other subsidiary requirements and illustrated by examples that, besides eliminating duplicated analysis, integration brings a general and emphatic tendency to increased convenience and decreased book size.

This chapter would hardly be complete, however, without some reference to the journal, and we may first say that, upon integration, the financial journal of course ceases to function in the same way as the other financial books shown.

Furthermore, the cost journal will cease to function, and this will usually mean a considerable saving, since under separate accounting it will probably have proved advisable, if not unavoidable, to pass through it every entry passing from the financial to the cost accounts. Thus, in fact, all the cost items in the purchase journal, cash book, petty cash book, and sales journal, as well as any in the financial journal, and all the wages and salaries and national insurance analyses, will probably have been the subject each period of cost journal entries, and this book will therefore have been a comprehensive one—indeed, the fundamental subsidiary book of the separate cost accounts.

Upon integration, many of the items passed through the cost journal need no longer be so treated, for, of course, the purchase journal, cash book, petty cash book, and sales journal, are now in suitable form for posting directly therefrom to the integrated nominal and to most of the integrated detail ledgers (the only exception being the stores ledgers, which are posted direct from goods received notes and requisitions).

The integrated journal will therefore probably be required to handle only the following items—

Wages and Salaries allocations (unless a separate wages and salaries journal is used).

National Insurance allocations.

Materials issued (unless a separate materials issued journal is used).

Cost period provisions (suspense items).

Other items referred to in Chapters IV and V.

Sundry adjustments.

Year end closure of accounts.

All these items (and many others) were, of course, handled by one or other of the separate journals previously, the first two probably by both in different ways.

Since the cost, and hence the integrated, accounts are of a detailed nature, it will be found that before most of the entries can be made in the journal it is necessary to prepare working sheets. We have already met examples of these on pages 24, 25, 27 and 29 and shall meet further cases in Chapters IV and V. It follows that a book alone is hardly sufficient, and it will probably have been the practice for the separate cost accounts to use working sheets first and to summarize these in a book afterwards, the book showing only control totals. Postings to *detail* ledgers may be made exclusively from the working sheets, e.g. from those shown on pages 24, 27 and 29 while the book journal is reserved for making postings to the *nominal* ledger. Working sheets and books should be cross-referenced.

The book itself may make full use of analysis columns so that nominal ledger postings for the analysis column items are only of totals once per period (black and red ink being used to make each column serve for both debits and credits).

Advantages of the journal plus working sheet method include the following—

1. **Workings** are sometimes complex, but working sheets allow unlimited space and permit clear and full explanations.

2. The working sheets may be given to the relevant clerk(s) to post the detail accounts, not being filed until after posting.

3. The book journal feeds the nominal ledger, satisfies safety precautions, and by the use of analysis columns almost counter-balances the slight duplication in writing in it the control totals.

In such cases all narrations should appear only on the working sheets, while these working sheets, or "journal vouchers," should be serially numbered for protective and cross-referencing purposes. A standard journal voucher form, to which more detailed working papers are attached, makes the journal voucher file more convenient and clear to refer to, the voucher numbers being plainly seen on successive standardized forms.

CHAPTER IV

OVERHEADS APPORTIONMENTS AND ALLOCATIONS

READERS will have observed that the three preceding chapters have chiefly contrasted in a number of ways what has to be done under separate accounting with what is necessary under integrated accounting. The present and the following chapter differ in that they deal with aspects of the integrated accounts which normally have no counterpart in separate financial accounts, since as a rule they concern the cost accounts only. They are, nevertheless, necessarily dealt with here, since it would not otherwise be possible to follow through a logical series of operations the complete procedure from first entry and first collection to the culminating preparation of cost-period and yearly accounts from the integrated books. It is also hoped that the mechanisms outlined in these two chapters may prove useful to those accountants who have no cost accounts at all but may now realize a way to have them by making full use of the economies offered by integration.

Apportionments of General and Service Overheads

We have already noted in Chapter II the integrated method of collecting overheads, i.e. by proper classification and the use of control accounts which are linked to detailed overheads ledgers. So far, however, we have dealt only with the *first* collection of these overheads, and readers will appreciate that cost accounting technique does not end here. In some way or other the overheads

must be applied : there are, indeed, at least three main ways in which these costs normally require to be viewed—

1. In total costs per code or expense item.
2. In detailed and total costs per department.
3. In the incidence of these costs to units of goods or services produced and sold or to processes, etc.

Chapter II satisfied the first of these points completely, i.e. the procedure described therein for overheads accounting led directly to the identification of overheads costs per code. Some steps towards costs per department were also taken by supporting a number of the code cards with department /code cards. This latter procedure, however, did not cover a number of items of a *general* nature, which require apportionment, nor did it lead directly to the *total* departmental costs even of the other items, i.e. we saw no account for a department showing the total of all the codes respectively relating to that department. No steps at all were taken towards (3).

First, therefore, we shall deal with the mechanism necessary to give complete departmental overheads costs, and then with the book-keeping aspects of the application of these to units of product and sale.

The first remaining requirement for complete departmental costs is the apportionment of all items of a general nature. It is outside the scope of this book to discuss the bases appropriate for the apportionments of the various items, and this matter is already covered at length in a number of text-books on cost accounting. It may, however, be helpful to outline a simple method of achieving the apparently complex book-keeping entries which appear to arise once the apportionment bases are ready to be put into effect.

The first group will necessarily be the general items, since the service costs cannot be ready for apportionment

until they themselves have received their particular share of these items. When, therefore, all the general overheads have been collected for the period or periods to which the apportionment is to apply, they may be entered upon a working paper of the type illustrated on page 50, at the line marked "Totals £ s. d." For convenience they may then be decimalized, and entered in the "Totals £'s decimals" line immediately above.

It will be seen that each horizontal line above this represents a department or a group total such as works, selling and distribution, etc. The columns, on the other hand, each represent a general expense, and are provided with an inset percentage column in which the percentages of each expense (arrived at from the apportionment bases) are inserted. The form is ready, once the £ s. d. totals and the percentages have been entered, to be given to the comptometer department for calculation, cross-adding, cross-balancing, de-decimalizing, and cross-balancing in £ s. d.

Once the cross-balancing is complete, the results shown may be journalized and postings made to the detail ledger *only* from the "£ s. d. totals" line (credits to general overheads ledger) and the "£ s. d. totals" column (debits to all the other overheads ledgers). It will be seen that all control totals are immediately visible. These are asterisked on the form for illustration purposes.

For the purpose of receiving these overheads charges, each overheads ledger (other than general) should contain a card for totals apportioned, showing the departmental and grand totals received by the group. If it is later desired to know how much of any particular expense has been debited to a department, this may be readily extracted from the original working sheet.

Service apportionments may be made by a similar

APPORTIONMENTS OF GENERAL OVERHEADS.

(Debits down
to Service
to this column
inclusive)

| Basis | 3 COST PERIODS ENDED | | | | | | | | | | etc. | | TOTALS | | TOTALS | | |
|------------------------|----------------------------|------------------------|------------------------------------|----------------------------|-----------------------------|------|--|---|----|----|------|----|--------|--|--------|--|--|
| | Area 601 Rent % | Area 602 Rates % | Tech. Est. 603 Electricity % | Tech. Est. 604 Gas % | Personnel 605 Water % | etc. | | £ | s. | d. | £ | s. | d. | | | | |
| Expense Dept. | | | | | | | | | | | | | | | | | |
| 10A | | | | | | | | | | | | | | | | | |
| 10B | | | | | | | | | | | | | | | | | |
| 10C | | | | | | | | | | | | | | | | | |
| etc. | | | | | | | | | | | | | | | | | |
| WORKS | | | | | | | | | | | | | | | | | |
| 13A | | | | | | | | | | | | | | | | | |
| etc. | | | | | | | | | | | | | | | | | |
| S and D | | | | | | | | | | | | | | | | | |
| etc. | | | | | | | | | | | | | | | | | |
| ADMIN. | | | | | | | | | | | | | | | | | |
| etc. | | | | | | | | | | | | | | | | | |
| SERVICE | | | | | | | | | | | | | | | | | |
| etc. | | | | | | | | | | | | | | | | | |
| TOTALS £'s Decimals | 100 | 100 | 100 | 100 | 100 | | | | | | | | | | | | |
| TOTALS £ s. d. | | | | | | | | | | | | | | | | | |

• POST
this line
(Credits)

Note.—Post only the totals indicated. All workings before these points are, for convenience, in percentages of £'s decimals. * = Control Total.

mechanism, adjustments for inter-service transfers, in those cases where they are large enough to warrant carrying them out, being completed first.

The frequency with which the apportionments are carried out may depend upon individual circumstances. As a general principle, however, it should be observed that if apportionments per expense item per department are required to any considerable degree, the *less* frequently the apportionments are made the fewer the working sheets from which the figures need be abstracted. In many cases it may be found quite sufficient to apportion four times a year, even although the year may include twelve or thirteen cost periods: it depends upon the frequency with which overheads rates are required—the more these rates fluctuate, the more frequent must the apportionments normally be.

Comparative Departmental Overheads

When both the general and the service overheads have been apportioned, the overheads controls and ledgers show the following balances—

| | | |
|---------------------------|---|---|
| Works. | } | Comprehensive balances including apportioned items. |
| Selling and Distribution. | | |
| Administration. | | |
| Service General. | } | Nil. |

Further, although the ledgers are arranged in expense item order, the department code cards contain all the information necessary for arriving at departmental rates, and all that remains to be done is to abstract on to summary sheets.

The design of these summary sheets will vary according to circumstances, but they will usually be in such a form

as to show comparisons from period to period and/or with budgeted figures.

A specimen form, for illustration purposes, is shown on page 53. In this particular case it is assumed that abstracting is carried out only quarterly and that the basis of comparison is from quarter to quarter, with the previous year's quarterly average inserted as a further comparison. It is also assumed that works overheads are expressed as a percentage of direct labour, figures for which are accordingly included so that the rates can be calculated from and entered upon the form. Other data, such as budgetary figures and absorbed amounts (see later in this chapter) can be inserted as required.

In a similar way, if selling and distribution and administration overheads are to be applied, for instance, as percentages of works cost of sales, works cost of sales figures may be inserted on the selling and distribution and administration summaries in lieu of direct labour.

(Note. In Chapter VIII we shall see that the *total*, as distinct from the *departmental*, abstracts fulfil a further essential accounting function in the preparation of the year-end accounts and for taxation purposes. For this purpose, as well as for others, "statistical" summaries of service and general items, although they have been apportioned out, will also be prepared.)

Overheads Allocations

Where output costing is used, it is probable that allocations of works overheads in the accounts themselves will be unnecessary. The departmental overheads, as we have seen above, are readily available, and it merely remains to relate these to the departmental direct labour, direct labour hours, units of product, etc., as required.

Where, however, work in progress accounts are maintained, as in job and batch costing, it is normally necessary

COMPARATIVE DEPARTMENTAL OVERHEADS SUMMARY (WORKS)

Dept. Year.

| Code | Direct Wages | Last Yr's Av. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | TOTAL | Av. |
|------|-------------------|---------------|----------|----------|----------|----------|-------|-----|
| 201 | Foremen | | | | | | | |
| 202 | Maintenance | | | | | | | |
| etc. | etc. | | | | | | | |
| 600 | Appd. General | | | | | | | |
| 500 | Appd. Service | | | | | | | |
| 200 | TOTAL | | | | | | | |
| | % of Direct Wages | % | % | % | % | % | % | % |

The form illustrated shows shillings and pence (except in the average columns) and is for the first abstracting. Besides the departmental summaries, a grand summary sheet will be prepared for each group by reference to the *code* accounts. This grand summary must of course agree with the relevant control account, and the departmental summaries must in turn agree to the grand summary.

For circulation to executives, shillings and pence should naturally be omitted. Further there is no reason why the executives' abstracts should be of the same frequency or in the same form as the essential from the executive point of view being to facilitate *prompt* control of *controllable* items. The form illustrated, however, is a basic accounting one, enabling the departmental works overheads rates to be computed and also showing causes of fluctuations in the rates.

to allocate overheads per job or batch according to the departmental direct labour, direct labour hours, machine hours, etc., spent on each job or batch.

As we have already determined the volume of the overheads for each department and related it to the relevant factor (if it is labour or machine hours, etc., this factor will displace direct labour on the departmental overheads summary), it follows that all that remains to be done is to measure the direct wages, etc., spent by each department on each job or batch, and apply the overheads at the appropriate rates revealed at the feet of the relevant departmental summaries (or these rates with budgetary adjustments).

As the direct wages, etc., per job will be recorded in the appropriate job accounts, it is then only necessary to schedule these departmentally and calculate the overheads at the applicable rates.

There are various methods adopted for carrying out this allocation process, and it is performed at various times. In some cases it is the practice to apply the works overheads at the same time as the labour is posted, and if this is the case it is convenient to calculate the overheads on the wages dockets. The specimen docket shown on page 24 would in such cases be designed to carry these overheads allocations in addition to the wages, and the journal voucher for wages allocations would be accompanied by one for the allocations of works overheads.

In other cases works overheads may only be applied at a later stage, and this may have some advantage in that the rate may then be an actual one, whereas only an estimated rate can be used if overheads are allocated with each direct labour posting. On the other hand, the delayed method may involve considerable work in scheduling the *departmental* direct wages, etc., for each

of a large number of jobs, and where jobs are finished quickly it may not be practicable at all.

When the accounts are integrated, however, freedom is in no way impaired to choose the most appropriate method: normally the method adopted in the separate cost accounts will continue to be used.

Similarly, the book-keeping entries are exactly the same within the integrated accounts as they were in the separate cost accounts. Basically, the entry is simply—

| | |
|-----------------------------|------------|
| Work in Progress | <i>Dr.</i> |
| To Works Overheads Control. | |

It is, however, suggested that it is better to leave the works overheads control uncredited so that it agrees straightforwardly with the detail ledger, and to place the credits to a works overheads absorption account, which may be linked to a small detail ledger showing the absorptions for each department.

Where absorptions (or allocations) are only carried out in the accounts once the rates are established, the credit in works overheads absorption control will equal the debit in works overheads control (the two accounts being mutually cleared by a transfer at the end of the year), while the departmental absorption accounts will show credits equalling the overheads totals shown on the various works departmental summaries (page 53).

Where absorptions are carried out earlier they can only be approximate, and under- and over-absorptions must subsequently be disposed of. Provided the balances are not large, this may probably be done with only a negligible practical drawback by clearing at the end of the year to the trading account (see Chapter V).

Summary of Dynamic Overheads Accounting

At this point it will be useful to retrace the whole of the procedures we have outlined in relation to overheads

accounting. Readers will recall that in Chapter II we discussed their *collection*. In the present chapter we first covered their *apportionment*, disposing entirely of the general and service groups by this process. Finally, where work in progress accounts are operated, we have considered their *allocation*, and disposed entirely of the works group. The whole of this dynamic treatment is shown diagrammatically below.

DYNAMIC TREATMENT OF OVERHEADS

| COLLECTION | APPORTIONMENT—I | APPORTIONMENT—II |
|--|---|---|
| Work in Progress (direct costs only) Works O'heads (direct only) Selling and Dis- tribution O'heads (direct only) Administration O'heads (direct only) Service O'heads (direct only) General O'heads | Work in Progress (direct costs only) Works O'heads (direct + general) Selling and Dis- tribution O'heads (direct + general) Administration O'heads (direct + general) Service O'heads (direct + general) | Work in Progress (direct costs only) Works O'heads (complete) Selling and Dis- tribution O'heads (complete) Administration O'heads (complete) |
| ALLOCATION | | |
| Work in Progress (complete) Selling and Dis- tribution O'heads (complete) Administration O'heads (complete) | | |

Thus we have selling and distribution and administration overheads ready for the profit and loss account, and *no other expense accounts* to worry about with the one exception of work in progress. At the fourth stage shown on page 56, this remains as an *asset*. In the next chapter we shall deal briefly with its conversion to an *expense*, after which we shall be ready to consider the ease with which the integrated accounts lead on to every profit and loss account required, whether short-term or yearly.

CHAPTER V

WORK IN PROGRESS AND TRADING ACCOUNTS

At the end of the previous chapter we saw that a stage had been reached where work in progress, selling and distribution overheads, and administration overheads, alone remained out of six original controls (page 56).

Output Method

Before proceeding with the present chapter, however, we must be clear that the case would have been somewhat different where output costing applied, for in such cases, instead of work in progress, we should probably have had remaining accounts for its three elements—direct labour, direct materials issued, and works overheads. These three accounts are, however, already of an expense nature, and are therefore *nearer* to the profit and loss account than is work in progress. We need give the output method no further consideration, therefore, until Chapter VI, when we shall refer to it again in connection with the preparation of short-term profit and loss accounts.

Conversion of Work in Progress into an Expense

We have seen that work in progress, although receiving a large volume of expense charges, has so far remained in the form of an asset. This, indeed, is at first the fact, and is simply an outcome of cost accounting dynamics which endeavour to reflect not merely the beginning and end of a year's activities, but also every intermediate stage as it occurs. Under the old historical method of

accounting, all the costs relating to work in progress would be treated immediately as expense (e.g. "factory wages," "purchases—general"), but to correct the position a valuation of work in progress (and also of stores) would be necessary before accounts could be produced.

The work-in-progress accounts in cost or in integrated accounts bear an analogy, on the other hand, to the stores accounts. They are in a sense perpetual inventories. All that goes towards building them is debited (cf. stores purchases), while all that goes out of them is credited (cf. stores issues).

The "going out" stage, however, may vary under different circumstances, and may often involve some nice problems of valuation upon which a great deal may hinge,

Standard Production. Where there is standardized production, say of parts leading to sub-assemblies, sub-assemblies to assemblies, and assemblies to sales, all these phases will be reflected in the integrated accounts, broadly along the following lines (assuming batch costing)—

On completion of parts—

Dr. Finished Parts Stores Control.

Cr. Work in Progress.

(The costs remain as assets).

On issue and sub-assembly—

Dr. Sub-Assembly Stores Control.

Cr. Finished Parts Stores Control.

(Unless the two are under a common control.)

Cr. Work in Progress (sub-assembling costs).

(The costs remain as assets.)

On assembly—

Dr. Finished Stock.

Cr. Sub-Assembly (or Finished Parts) Stores Control.

Cr. Work in Progress (assembling costs).

(The costs remain as assets.)

On sale—

Dr. Trading Account.

Cr. Finished Stock.

(The costs are charged as expense.)

Before discussing the trading account introduced above, it is perhaps as well to acquaint those readers who have not carried out such accounting operations as the above that such transfers of cost may be fraught with many problems of valuation, as cost accountants will be well aware. The ideal solution, from the practical accounting as well the cost control angle, would certainly appear to lie in the use of standard costing, the parts, sub-assemblies, and assemblies being valued at cost standards upon each transfer. In such cases variances may arise (and will also probably have arisen during production of the parts), and such variances may be debited or credited to a set of detailed variance accounts linking to a variance control in the integrated nominal ledger. The variances are then immediately ready, like the surviving overheads controls, for transfer to the trading account.

Provided, therefore, that cost standards are used, the finished stock will be debited at standard to a trading account upon withdrawal and sale, and it is at this point, and not until this point (except for variances),

that the accumulating costs of production are converted from asset to expense.

Non-standard Production. Where jobbing work is done, the debits to the trading account will more usually come directly from work in progress, instead of via stores controls as illustrated on pages 59 and 60. Any finished parts or portions of any particular job, being non-standard and hence less amenable to stores classification, will normally be more conveniently held in work in progress right up to the time of invoicing.

When, however, the invoicing is carried out, the problem of valuing the credit to work in progress will again arise, and where it is not practicable to apply standard costing technique (e.g. due to unknown factors before the job is commenced), or where, at all events, standard costing has not been applied, it will usually be the practice to take out from the work in progress account the *estimated works cost* of the work invoiced. Since a profit margin will have been fixed beforehand, and allowance also made for selling and distribution and administration overheads, this should mean that the trading account shows a profit on the invoicing equal to these three factors, and after transfer of the selling and distribution overheads and of the administration overheads, the originally planned profit should remain.

In actual practice, however, it will rarely happen that jobbing work is carried out for *precisely* the estimated works cost, and therefore balances (debits if losses have been made, credits if profits) will usually tend to remain in the job accounts after completion of all invoicing. To overcome this difficulty, the progress department should invariably advise the accounts department when jobs are completed, and balances left in the job accounts in respect of work both completed and completely invoiced should be written off to the trading account at

the end of the cost period. In this way losses are promptly reflected in the short-term profit and loss accounts, whereas, were this not done, an utterly false impression might be given.

Trading Accounts

We have seen above that one function of the trading account is to receive debits, either directly or via stores accounts, from work in progress. These debits represent the *works cost of sales*, and so long as the costing method is one by which work in progress accounts are operated (but not otherwise), no adjustments at all have to be made for stocks and partly finished work at the beginning and end of an accounting period, for these stocks are automatically held in asset accounts (work in progress and stores) in the integrated books.

The credit side of the trading account simply takes the credits for invoicings, and is thus the equivalent of the "sales account" in the separate financial books.

The trading account thus goes on building up the progressive position throughout the year as to—

1. Works cost of sales.
2. Turnover.
3. The difference between the two, or gross profit.

Since the selling and distribution and administration overheads controls are similarly accumulating these groups of expense, the *net* profit is also available from period to period.

For record and end of year purposes, it is desirable that the debits to the trading accounts from work in progress should, where possible, be analysed into—

- (a) Direct labour,
- (b) Direct materials, and
- (c) Works overheads,

and the debit side of the trading account may therefore usefully be provided with analysis columns for these three items.

Where different types of product are required to be kept separately, separate trading accounts should be arranged, and the sales journal will need corresponding analysis columns (or their equivalent), so that the correct sales credits may be posted to the relevant trading accounts.

CHAPTER VI

SHORT-TERM PROFIT AND LOSS ACCOUNTS

HAVING now reached a point at which we are almost ready to produce a short-term profit and loss account, it will be well to return for a moment to our earlier contention that integrated accounts were *safer* than separate cost accounts, and to review two aspects in particular to which this contention applies.

In the first place, let us suppose that by mischance an expense item had been entered in a non-expense column of one of the subsidiary books—for example, in the bank column, or one of the personal ledger columns, of the cash book. Under such circumstances, the bank account, or the ledger control, would, of course, fail to reconcile; nevertheless, whether or not the cost accountant had found this error, his trial balance of the separate cost accounts would still balance. When the error was discovered on the financial side, it would be purely a matter of co-ordination whether or not the cost accountant was advised. In other words, the balancing of separate cost accounts trial balances proves less than that of integrated accounts trial balances, for the latter trial balances will not be regarded as complete until reconciliations with all the detail accounts, including the personal ones, and with the bank statement, have been carried out. The unified control of integrated accounts should ensure that all such errors are brought to the notice of the person responsible for the short-term profit and loss account, i.e. the integrated accountant. Under separate accounting, the safeguard relies upon human co-operation, and where

friction or lack of cohesion between the two accounting systems exists, this may be dangerous.

Again, of course, there is the comparatively vast field of purchases, which the cost accountant must untangle every period, and there are numerous untanglings and re-groupings to be performed with regard to overheads. All these unnecessarily complicated procedures, besides costing money, "ask" for errors, yet such errors may easily not be found until the reconciliation between the two sets of accounts at the end of the year. Such reconciliations may be long, tedious, and wasteful of skilled time. They prove, however, nothing but that the short-term accounts were right or were wrong, knowledge which may justify exuberance or cause despair, but which in any case will have arrived far too late to be of the least possible use in policy guidance!

In discussing short-term profit and loss accounts, therefore, we shall assume that they are to be produced from integrated accounts, or, in other words, we may reasonably assume that they are reliable.

Readiness to Produce Period Results

Since two groups of overheads (selling and distribution, and administration) have been accumulated, and all the other groups disposed of where there are work in progress accounts; or, where there are no work in progress accounts, since works overheads, direct labour, and direct material issued, have also been accumulated; and since all transfers in respect of invoicings from the work in progress accounts, where they exist, have been made; we should now, *under ideal conditions*, be immediately ready to produce a profit and loss account. In practice, however, the ideal conditions referred to will rarely exist, for the following are the matters as to which the accounts, to be ideal, must be completely up to date—

1. Cost periods must always end on a pay day. (They may, for instance, with four-weekly cost periods, but cannot with calendar months.)

2. Pay must be paid for all work right up to the end of that pay day. (This may easily apply to salaries, but rarely to factory wages.)

3. All other "outstandings" must have been brought into the books to date. (The suspense procedure will almost cover this, but it is quite likely that a few non-suspended items may in some circumstances be outstanding.)

4. All apportionments of overheads must have been made in the accounts. (There is, however, as we shall see, an easy way of achieving the same effect.)

5. Where there are no work in progress and finished stock accounts, figures of the closing balances must be ready to debit in the books. (Again, it is a simple matter to achieve the same effect without book entries.)

Taking (1) and (2) conjointly, it may first be said that *before apportionments of overheads are made*, it is essential to provide for all accrued wages, and salaries if any. Under the system of accounting outlined in this book, it will be found that it is not convenient simply to carry down accrual balances as was done in the historical accounts, and therefore the provisions should at such times be journalized, the entry being reversed first thing in the next period. As such provisions and their subsequent reversals will normally require a fair amount of detail, it is suggested that they need be carried out *only* before overheads apportionments, being dealt with broadly and statistically at the end of any periods when apportionments are *not* being effected.

As to (3), there may be some items which are always in arrear, yet are hardly suitable for suspending. In some

cases carriage may fall into this category. These items, if any, can be dealt with simply by the method to be shown.

As to (4), where the cost periods are short and the overheads rates not subject to violent fluctuations, it may not be desired, and may not be in the least necessary, to apportion general and service overheads every cost period: they may be apportioned at longer intervals, such as quarterly. This causes no difficulty, however, in profit and loss account preparation for the intermediate periods, as will be shown in the method following.

As to (5), under output costing or equivalent conditions, closing values of work in progress and finished stock must be ascertained. If a proper system of production control exists, it is probable that work in progress can be reliably taken by a paper method, and this should always emphatically be the objective. Finished stock may be taken either from stock records (if maintained and thoroughly reliable), or physically.

Working Papers for Short-term Profit and Loss Accounts

Since in practice none of these five conditions may always apply at the end of every period, we shall assume that, although we have come so far with the accounts, we still have to provide for all of them.

First, then, it is necessary to estimate the outstanding wages and salaries by reference to the weekly volume of these under each expense heading and to the number of working days from the last day paid for up to and including the last day of the period. This calculation is usually quite simple.

Next, it must be questioned whether there are any accrued items not already provided for by the suspense procedure and having a direct bearing on the short-term

profit. We shall assume for illustration purposes that carriage is the only item in this category.

Thirdly, we must broadly determine, on the basis of past experience, the apportionments to works, selling and distribution, and administration overheads, i.e. the apportionments of the balances accrued in the general and service controls since the last apportionments were carried out.

Finally, where output or equivalent costing applies, we must of course measure and evaluate closing work in progress and finished stocks.

All these matters may be dealt with without any book entries, the results being embodied in a working paper which commences with extractions from the trial balance and closing stock figures where necessary, and by adding columns to effect the various adjustments, ends with the final cumulative figures to the end of the cost period under review. The form of the working sheet will vary slightly according to whether or not there are work in progress accounts. A specimen working paper, where there are such accounts, is therefore shown on page 69, and one where there are not such accounts on page 70.

Summary of Working Papers

The working papers illustrated exemplify the brief route from trial balance to short-term profit and loss account. Of course, at the end of those periods when overheads apportionments have been made, and therefore, in addition, all non-suspended accruals brought into the books, no working paper should be necessary: the trial balance, plus closing values of work in progress and finished stocks in applicable cases, will immediately give the cumulative profit and loss figures.

Once the cumulative figures are shown in the profit and loss account, deductions from the corresponding figures

SPECIMEN WORKING PAPER FOR SHORT-TERM
PROFIT & LOSS ACCOUNT

(Where there are Work in Progress Accounts).

PERIOD ENDED

(Cumulative Workings only)

| Details | Trial Balance £ | Out-standings not yet in books £ | Apportion General Expenses £ | Apportion Service Expenses £ | P. & L. A/C Cumulatives £ | Remarks |
|---------------------------------------|--------------------|-------------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------------|
| Works Cost of Sales (per Trading A/c) | 25,729 | | | | 25,729 | |
| Over-absorbed Works Overheads | 1,400 Cr. | 108† | 524 | 800 | 32 | Under-absorbed |
| S & D Overheads | 2,907 | { 180* 49† | 110 | 356 | 3,602 | |
| Administration Overheads | 1,104 | — | 10 | — | 1,114 | |
| | 28,340 | 337 | 644 | 1,156 | 30,477 | †Wages & Salaries *Carriage Out |
| Overheads not yet apportioned :— | | | | | | |
| Service | 984 | 104† | 88 | 1,156 Cr. | — | |
| General | 732 | — | 732 Cr. | — | — | |
| Total Cost of Sales | 30,036 | 441 | — | — | 30,477 | |
| Turnover (per Trading A/c) | 31,447 Cr. | — | — | — | 31,447 Cr. | |
| Net Profit | £1,411 Cr. | £441 | — | — | £970 Cr. | |

Notes—

1. It is assumed that outstanding *direct* wages will not materially affect write-offs from work in progress to trading account; in any statement of assets and liabilities at the end of the period, however, they should be added, if this is the case, to both sides.

2. The above may be varied to suit circumstances; where there are several trading accounts, final overheads figures must probably be determined first and separately, then applied to each.

3. The period's figures in the profit and loss account will of course be determined by deducting the above cumulatives from the previous period's cumulatives.

to the end of the previous period, and substitution of the relevant stock figures at the start of the *period* for those at the start of the *year*, in the case of output or equivalent costing, will give the figures for the present period.

SPECIMEN WORKING PAPER FOR SHORT-TERM
PROFIT & LOSS ACCOUNT

(Where there are not Work in Progress Accounts)

PERIOD ENDED

(Cumulative Workings only)

| Details | Trial Balance and Closing Stocks £ | Out-standings not yet in books £ | Apportion General Expenses £ | Apportion Service Expenses £ | P. & L. A/C Cumulatives £ | Remarks |
|---|---------------------------------------|-------------------------------------|---------------------------------|---------------------------------|------------------------------|-------------------|
| Work in Progress at start of year | 2,799 | | | | 2,799 | |
| Direct Labour | 4,802 | 281† | | | 5,083 | |
| Direct Materials Issued | 8,784 | | | | 8,784 | |
| Works Overheads | 3,605 | 64† | 386 | 490 | 4,545 | |
| | 19,990 | 345 | 386 | 490 | 21,211 | |
| <i>Deduct :—</i> Work in Progress at end of period | 3,604 Cr. | | | | 3,604 Cr. | |
| Works Cost of Production | 16,386 | 345 | 386 | 490 | 17,607 | |
| Finished Stock at start of year | 4,815 | | | | 4,815 | †Wages & Salaries |
| | 21,201 | 345 | 386 | 490 | 22,422 | *Carriage Out |
| <i>Deduct :—</i> Finished Stock at end of period | 3,777 Cr. | | | | 3,777 Cr. | |
| Works Cost of Sales | 17,424 | 345 | 386 | 490 | 18,645 | |
| S & D Overheads | 1,444 | { 140* | 42 | 111 | 1,770 | |
| Admin. Overheads | 656 | { 33† | 20 | 12 | 688 | |
| Service Overheads (unapp.) | 503 | 61† | 49 | 613 Cr. | — | |
| General Over-heads (unapp.) | 497 | — | 497 Cr. | — | — | |
| Total Cost of Sales | 20,524 | 579 | — | — | 21,103 | |
| Turnover | 21,888 Cr. | | | | 21,888 Cr. | |
| Net Profit | £1,364 Cr. | £579 | — | — | £785 Cr. | |

Notes—

1. It should be noted that in this case it is essential to introduce outstanding direct wages, for, of course, they will be embodied in the closing work in progress value which under *these* circumstances will be arrived at independently.

2. The period's figures in the profit and loss account will be determined by deducting the above cumulatives from the previous period's cumulatives and substituting the necessary opening stock figures.

CHAPTER VII

SHORT-TERM AND FINAL ACCOUNTS— STORES AND STOCK RESERVES

MENTION was made in Chapter III that certain special problems with regard to stores and stock valuations might arise upon integration, and it will now be appropriate to give these consideration. It is to be understood that these problems may also relate to the valuation of work in progress.

Probable Conditions under Separate Accounting

Under separate financial and cost accounting, it may commonly be the case that the valuations placed upon opening or closing stocks for the *balance sheet*, i.e. in the financial accounts, differ from (normally being lower than) those in the cost accounts.

As to raw materials stores items, the costing valuations will normally fall under the generic heading of "at cost." In some cases it may be the practice to inflate the stores values in respect of certain stores expenses: again, issues may be at average, first in first out, or last in first out. Nevertheless, it may be said that generically all the balances left in the stores accounts, whatever method is used for dealing with stores expenses, and whichever of the above methods is used for pricing issues, can be termed "at cost" balances.

Again, work-in-progress balances, where such accounts are operated, purport to represent in the cost accounts actual costs (or standard costs); while the finished stock balances similarly purport to represent standard costs (or actual costs).

Readers will be well aware, however, that upon balance sheet preparation it is often necessary to adjust such stock and work-in-progress balances, and similarly raw materials balances, for reasons which may include the following—

1. Obedience to the principle of "cost or market, whichever is the lower."
2. Customary policy.
3. Obsolescence or deterioration.

The fact that the two sets of accounts do not always run parallel in this matter of course gives rise to one feature of the "reconciliation of costing and financial profits."

Once this reconciliation is dispensed with, and once there is only one set of accounts, it is clear that food for thought arises. How may the different valuations be handled in the integrated accounts?

Treatment in Short-term Accounts

First, it should be clearly appreciated that financial adjustments to stock, stores, and work-in-progress balances should not be allowed to affect the *short-term* accounts at all. It is clearly either highly inconvenient or utterly impracticable to alter in detail numerous detail stores accounts, work-in-progress accounts, or finished stock accounts; nor, even were it not, would it be desirable to do so. The short-term accounts produced from the integrated books, in exactly the same way as those produced from the separate cost accounts, should continue to show what is commonly called the *efficiency profit*, i.e. the profit before taking into consideration any alterations dictated by financial policy.

It follows, then, both from this requirement and from the fact that the detailed stores, and, where applicable, work-in-progress and finished stock accounts, must

reconcile to their respective controls in the integrated ledger, that these controls and detail accounts must all be left undisturbed, whatever is done by way of policy revaluations at the year ends.

The profits shown by the short-term accounts, nevertheless, must clearly be understood by the board to represent efficiency profits, not final profits, and provided that the normal balance-sheet valuation is lower than the "at cost" valuation, this matter may be explained to the board thus—

"The accumulating short-term profits represent efficiency profits. If the probable final accounts position requires to be visualized, you must *add* to them the sum of £, which was the amount by which 'at cost' values exceeded balance-sheet values at the start of the financial year. On the other hand, you must be prepared to *deduct* from them whatever amounts you write off from the closing stock at the end of the year."

The board should also appreciate that this closing depreciation will be much greater, or much less, than the opening one, *where exactly the same policy is pursued*, if the closing stocks are respectively much greater, or much less, than the opening stocks.

This factor should always be borne in mind when interpreting the short-term results; and, indeed, if separate cost accounts have been operated previously, it should already be perfectly familiar to the board.

Treatment in Integrated Accounts at Year Ends

Since we have decided that, whatever happens, all stores, work in progress, and finished stock controls and detail accounts are to be left entirely unaffected by revaluations, it follows that these revaluations must be inserted in the integrated accounts as reserves. Assuming that the balance-sheet figures are lower than the costing

figures, the following would be necessary at the end of the *first* year—

1. *Dr.* ?

Cr. Raw Material Stores Reserve,

2. *Dr.* ?

Cr. Work in Progress Reserve,

3. *Dr.* ?

Cr. Finished Stock Reserve,

where the three categories shown existed in the accounts. As to where the debits would go, it is suggested that the following will normally be the appropriate receiving accounts—

(1). Stores Issues (under output or equivalent method). Direct to Trading Account(s) (under methods with work-in-progress accounting).

(2) and (3). Under output or equivalent method, where closing work in progress and finished stock are treated by the old-fashioned method, the full entries will be—

Dr. Work in Progress, etc., at cost.

Cr. Work in Progress Reserve (difference).

Cr. Trading Account (balance sheet figure).

Where work-in-progress accounting applies, place the debits directly to Trading Account(s).

It is possible that in some cases write-downs may be due to obsolescence or deterioration: under these circumstances it may be equitable to debit to relevant overheads accounts. And similarly if, for example, maintenance stores are being written down.

After the end of the first year, the amounts of the adjustments which have to be disposed of will simply be the reserves required at the end of this year *less* the

reserves already in the books, and the answers may be either positive or negative quantities.

It is to be noted that by these means all controls and detail accounts are left undisturbed, while the amount of each write-down at the end of any year is clearly visible by reference to the balance in each reserve account at that date.

Reconciliations of Cumulative Short-term and "Financial" Profits

In order to demonstrate the link between the cumulative profit revealed by the last of the year's short-term profit and loss accounts and the profit shown by the "final" profit and loss account, and to illustrate the effect of revaluations on what would otherwise have been the profit, a simple reconciliation should be drawn up.

This must in no circumstances be confused with the "reconciliation of costing and financial results" previously drawn up under separate accounting. It differs in the following ways—

1. It does not have to explain differences in treatment between two sets of books.

2. It does have to cover only one type of difference of those previously covered—differences in stock (etc.) valuations at the ends of the two years.

3. It does not require possibly quite disproportionate searching and difficulty to make it balance.

4. It is prepared by simple reference to the opening and closing reserve figures.

5. Its only purpose is to show the effect of policy revaluations at the ends of the two years on what would otherwise have been the profit.

A specimen reconciliation with imaginary figures is shown on the next page.

SPECIMEN RECONCILIATION OF CUMULATIVE
SHORT-TERM PROFITS WITH FINAL PROFIT

| | £ |
|---|--|
| Cumulative Efficiency Profit per four weekly Profit and Loss Accounts, 13 Periods to..... | 14,792 |
| <i>Add—</i> | |
| Opening Stock Reserves : | £ |
| Raw Materials | 1,209 |
| Work in Progress | 288 |
| Finished Stock | 2,054 |
| | <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 3,551 |
| | <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 18,343 |
| <i>Deduct—</i> | |
| Closing Stock Reserves : | £ |
| Raw Materials | 1,444 |
| Work in Progress | 294 |
| Finished Stock | 2,102 |
| | <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 3,840 |
| Year's Profit per published accounts | <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> <u>£14,503</u> |

Note—The efficiency profit would have been made if stocks at both ends had been valued at cost.

Finally, it may be well to repeat that the short-term profit and loss accounts which follow such reserves continue to be based on “at cost” values. In respect of items which are requisitioned out, this is automatic. Where, however, the output or equivalent method is used, the opening balances of work in progress and finished stock to be debited to the next year's short-term accounts will be the “at cost” balances, *not* the “at cost” balances less the reserves, and care must be taken to see that this is adhered to; and the valuations of all interim stock takings will continue to be strictly upon the “at cost” basis.

CHAPTER VIII

FINAL ACCOUNTS—PREPARATION— AND TAXATION

THE preparation of final accounts will normally be found considerably easier from integrated accounts than from separate financial accounts. This is due to the following factors—

1. It is not necessary to find the latest invoices for a large number of overheads items (e.g. electricity, rates, gas, water, insurances) and calculate the amounts accrued or prepaid at the end of the year: these amounts are already in the suspense accounts. (Non-suspended items, e.g. wages, must, of course, still be journalized.)

2. It is not necessary to write off a large number of overheads accounts to the manufacturing, trading and profit and loss account. Where work in progress accounts operate, many of the write-offs have already been done to the trading account(s), and only selling and distribution and administration overheads *control* totals (two amounts only) need transferring. Where work in progress accounts are not operated, only direct labour, direct materials issued, works, selling and distribution, and administration overheads *control* totals (five amounts only) need transferring, plus work in progress and finished stock figures. (Apportionments of general and service overheads must of course have been journalized.)

Specimen accounts are illustrated on pages 78 and 79.

SPECIMEN TRADING AND PROFIT AND LOSS
ACCOUNT

(Where Work in Progress accounts are operated)

| | £ | | £ |
|---|----------|-------------------|----------|
| Works Cost of Sales*— | | Sales | 229,713 |
| Direct Labour £22,714 | | | |
| Direct Materials 83,610 | | | |
| Works Overheads 52,886 | 159,210 | | |
| | | | |
| Gross Profit, c/d | 70,503 | | |
| | £229,713 | | £229,713 |
| Selling and Distribution Overheads | 41,604 | Gross Profit, b/d | 70,503 |
| Administration Overheads | 10,410 | | |
| | 52,014 | | |
| Net Profit, to Appropriation Account | 18,489 | | |
| | £70,503 | | £70,503 |

Note.—Cf. with "P & L A/c Cumulatives" column on page 69, which can be rearranged into exactly the same form.

*These figures are simply the transfers from work in progress or finished stock to the debit side of the trading account throughout the year (Chapter V). Variances or under- or over-absorptions of works overheads may be included in them or shown separately.

SPECIMEN TRADING AND PROFIT AND LOSS
ACCOUNT

(Where Work in Progress accounts are not operated)

| | | | |
|---|-----------------|------------------------------------|-----------------|
| Work in Progress at Start | £ 2,799 | Works Cost of Pro- duction, c/d | £ 80,969 |
| Direct Labour | £19,610 | | |
| Direct Materials | | | |
| Issued | 40,140 | | |
| Works Overheads | 22,631 | | |
| | <u>82,381</u> | | |
| | 85,180 | | |
| <i>Deduct—</i> | | | |
| Work in Progress at End | 4,211 | | |
| | <u>£80,969</u> | | <u>£80,969</u> |
| Finished Stock at Start | 4,815 | Sales | 106,410 |
| Works Cost of Produc- tion, b/d | 80,969 | | |
| | <u>85,784</u> | | |
| <i>Deduct—</i> | | | |
| Finished Stock at End | 3,112 | | |
| Works Cost of Sales | 82,672 | | |
| Gross Profit, c/d | 23,738 | | |
| | <u>£106,410</u> | | <u>£106,410</u> |
| Selling and Distribution heads | 9,001 | Gross Profit, b/d | 23,738 |
| Administration Overheads | 3,162 | | |
| | <u>12,163</u> | | |
| Net Profit, to Appropria- tion Account | 11,575 | | |
| | <u>£23,738</u> | | <u>£23,738</u> |

Note—Cf. with “ P & L A/c Cumulatives ” column on page 70, which can be rearranged into exactly the same form.

Details of Overheads

Readers will note that the accounts on pages 78 and 79 show no details of individual overheads expenses, but simply some of the (i.e. the surviving) control totals; on page 78, two controls, and on page 79, three controls. These control totals may, however, be supported by schedules showing their make-up (and also those of the apportioned expenses before apportionment); alternatively, the details of the surviving controls may be included in the trading and profit and loss account itself; or thirdly, they will already be shown on the corresponding comparative overheads summaries (e.g. page 53) and may not be required in any other form.

Taxation

For taxation purposes, copies of the comparative overheads summaries should be made available to the Inspector of Taxes with the accounts.

The following summaries will include *apportionments* which the Inspector should ignore—

1. Works.
2. Selling and Distribution.
3. Administration.

The following summaries, though not mentioned in the accounts, will show expenses in their original incidence, and will together equal the total of the apportioned items which the Inspector has ignored in (1), (2) and (3)—

4. Service.
5. General.

Items (2) and (3) will agree with figures in the trading and profit and loss account. Item (1) will also agree with a figure in the trading and profit and loss account where work in progress accounts are not operated (as on

page 79), but where work in progress accounts are operated (as on page 78) no figure with which to agree the summary directly will appear in the accounts. (The works overheads amount on page 78 is simply part of the year's transfers from work in progress or finished stock to trading account, as described in Chapter V.)

To overcome this difficulty, copies of the original journal vouchers allocating the works overheads to work in progress, and agreeing to the year's total, or a certified extract from the trial balance showing the works overheads debit and the works overheads absorption credit, should be made available to the Inspector if required. Alternatively, the auditors may be required to certify that the works comparative summary agrees with the company's accounts, and, indeed, they may automatically have done so if this summary is included with the accounts.

Comparative Figures

Under the Companies Act, 1948, the corresponding figures for the previous year must be shown in the published accounts. Those items which are chargeable against profits (as distinct from appropriations), and require to be so shown, are—

1. Emoluments of directors.
2. Auditor's remuneration.
3. Depreciation.
4. Debenture and loan interest.

In the first year after integration there will usually be no difficulty in providing these comparisons, as it will normally be found that under integrated accounting these particular figures (with the possible exception of directors' emoluments) are collected in the identical form to that

in which they were collected for the separate financial accounts.

Since these figures will not appear individually in the published accounts (unless the accounts circulated include the comparative overheads summaries) they should be added as a note.* Under no circumstances should they be switched to the appropriation account simply in order to comply with the Act, for this is not only unnecessary, but would also vitiate proper expense grouping and would amount to treating charges against profit as appropriations of profit.

Balance Sheet

The form of the balance sheet is not affected by integration.

* It may not be necessary to add *interest* as a note. Where it has been decided to omit interest on capital from the costs, this item may appear *separately* in the profit and loss account, and if the latter account is published the legal obligation is then fulfilled.

CHAPTER IX

ASPECTS OF THE CHANGE-OVER

THIS book would hardly be complete without a few brief notes upon the *change-over* from separate accounting to integration.

Nominal Ledger Change-over

First, a little thought will make it evident that the only time when the change can be effected is at the end of a financial year. Were the change made during the course of the year, it would not be possible to present final accounts for the year on a homogeneous pattern : the trading and profit and loss account could neither be entirely on the old style nor entirely on the new.

It is barely possible that this difficulty might be overcome by an intricate series of transfers of direct and indirect expense balances, but such an operation, even in the best of circumstances, would be hazardous and difficult and is fervently to be avoided.

At the end of the year there *are* no expense balances, except a relatively few accruals : these are transferred to suspense control and suspense detail accounts, wages control, and any other relevant accounts. Stocks are in the books and are split into " at cost " values (debited to stores controls and in applicable cases stock accounts) and the amounts of devaluation (credited to stores reserves and in applicable cases stock reserves) ; and the new accounts are in the right shape for commencement.

All finishing accruals in the last of the separate financial accounts should be dictated by the volumes required to

open the suspense accounts in the new integrated books with a scientifically based set of figures, so that the period provisions thereafter do not have to overtake deficiencies or lose excesses with consequent upsetting of the overheads rates.

Subsidiary Books

The subsidiary books must have been designed and printed in time for the first day of the first year of integration. With due care this should involve no difficulty except possibly from the time factor viewpoint. In view of the time taken for special printing, it normally follows that agreement to integrate the accounts must precede the appointed day, i.e. the end of the year, by a considerable period—probably several months.

Other Planning Necessary

If, of course, there has been no cost accounting in the past, then the planning and research necessary for this must be carried out as well as the (relatively negligible) integration planning. In cases where businesses, in view of the economies offered by integration, decide to set up cost accounting and to use integrated accounts from the commencement, it must be remembered that study of production methods, measurement and calculation of overheads apportionment bases, study of present accounting methods and factory paper work, and many other matters, will have to be considered and *finalized* before the chosen year-end date. Even in a medium-sized concern (say 300–500 employees) this may easily be a full six-months' programme.

Where, however, separate cost accounts exist, the length of time required to design and print books on the integrated pattern will normally be the only limiting factor, staffing rearrangements being planned while the books are being printed.

Staffing

If there has been no cost accounting before, it will probably be found that little or no addition to the staff is required. Sufficient calculating machine strength must be provided if it is not already there, but the staffing problem will normally be principally a matter of changing the ways the present staff does its work, and using the spare time accruing from these changes for the new cost accounting work.

To what extent this is applicable will depend partly upon the complexity or otherwise of the costing problems themselves. The author knows of one case, however, where a company moved from only historical accounting to complete cost measurement and cost control, monthly profit and loss accounts and data, and some highly significant applications of marginal costing, by means of integration, with an additional cost equal to only 0·1 per cent of turnover ! This clearly shows what scope there may be for developing cost accounting from scratch at barely any cost, but the cost will inevitably be much heavier, and the results less sure, if integration is ignored.

Where separate cost accounts already exist, integration will mean a reduction of staff and more surety. The savings should be considerable, the data more prompt as well as more certain, and the board will have the satisfaction of knowing that that department which measures the efficiency of others has significantly improved its own efficiency, successfully redeploying itself to the economic benefit both of the business and of the country at large.

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