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## Administrative and Selling Costs, Their Nature and Distribution

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**NATIONAL ASSOCIATION  
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COST ACCOUNTANTS**

**Affiliated with The Canadian Society  
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**Official Publications**

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Vol. VI      January 2, 1925      No. 9

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**Administrative and Sell-  
ing Costs, Their Nature  
and Distribution**

**BUSH TERMINAL BUILDING  
130 WEST 42nd STREET. NEW YORK**

# NATIONAL ASSOCIATION OF COST ACCOUNTANTS

Affiliated with The Canadian Society of Cost Accountants

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## Official Publications

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Vol. VI, No. 9

January 2, 1925

### Administrative and Selling Costs, Their Nature and Distribution

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and  
ANDREW STEWART, C.A., F.C.W.A., A.S.A.A.

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"The Cost Accountant"  
Official Organ of The British Institute of Cost and Works Accountants

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BUSH TERMINAL BUILDING  
130 WEST 42nd STREET, NEW YORK CITY

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JANUARY 2, 1925

# National Association of Cost Accountants

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## PUBLICATION DEPARTMENT NOTE

In view of the interest which has developed in the problems of selling and administrative costs in this country during the last few years, and especially in view of the fact that one of the sessions at our recent Convention in Springfield was devoted to this subject, the following material presenting the English viewpoint will undoubtedly be of interest to our members.

This material is taken from one of the sessions at the Annual Conference of the British Institute of Cost and Works Accountants, which was held in London, on July 25th, 1924. The two papers presented were followed by a discussion which was also interesting, but space will not permit us to reprint it in this volume.

There are two papers; one by Mr. Higginbotham starting below and one by Mr. Stewart starting on page 14.

## ADMINISTRATIVE AND SELLING COSTS, THEIR NATURE AND DISTRIBUTION

Although an exact line of demarcation cannot be drawn, we may consider our subject matter as divisible, roughly, into two classes:—

- (i) Administrative costs or expense,
- (ii) Selling and distribution expense,

recognising meanwhile that the latter class will, in general, contain an element of the former.

In common usage the words "Administration" and "Organisation" are employed somewhat ambiguously, and as synonymous terms. Strictly speaking, the former denotes management, government, direction, service, the conduct of office or employment, whereas the latter implies the process of forming an organism, capable of the performance of predetermined purposes or functions, and composed of organs or instruments of perception, expression, and action. The work of organisation is constructive and finite: the purpose of administration is conservative and continuing, and appears to involve the pre-existence of something which is to be served, managed, directed, or governed. We may observe that both processes or functions are operative, however crudely, in all cases of collective human effort or existence; that both are the acts of individuals; and that both imply, in such cases, a subordination of the many to the purpose of the few. I suggest, therefore, that the process of organisation in human affairs should be regarded as that of grouping individuals, in such manner as to form a recognisable entity; whereas the function of administration is the control, direction and service of the endeavours of those individuals in the furtherance and accomplishment of a common purpose.

Our present concern is with administration and organisation in the economic sense—as applied to industry and its operations. In economics, organisation (by which term we may understand also administration) is postulated as the fourth factor in the process of production; as the function of the employer, whereby land (or natural resources), labour and capital are co-ordinated in a common service. We may now state that function, therefore, as comprising, under the heading of:—

*Organisation,*

- (i) The formulation of a productive purpose or plan,
  - (ii) The supply of installation and equipment, and of materials of production in accordance with that plan,
  - (iii) The combination of *personnel* as a complete producing unit, whereof the parts shall act in co-ordination, employing the equipment and materials supplied in pursuance of the general purpose,
- and under the heading of:—

*Administration,*

- (i) The maintenance, substitution, or modification of the productive plan,
- (ii) The maintenance and replacement of installation and equipment; and the continued supply of materials of manufacture and operation,
- (iii) The maintenance of the human organism itself, and the service, control, and direction of its actions in accordance with the general purpose, as originally conceived or as modified or substituted.

Such I conceive to be the function of administration in industry; essentially personal, and inherently one of co-operation and service; and as such it is conceived in the great organisation whose destinies are so ably controlled by the President of our Institute—and in which I have the honour to serve.

In attempting to typify the form and mode of action of the productive organism, I can offer no better or more appropriate illustration than the human body itself—admittedly the most perfect example of organisation; capable, as it is, of maintaining its varied activities under the most diverse (and adverse) conditions of existence.

Accepting the analogy, we may now consider the purpose of the producing organism, its component units, their functions, and the duties of its administrative officers. In so doing, and with your permission, I shall discard the titles ordinarily used, substituting therefor the nomenclature of the public services, with such titles as Controller, Director, Section Director, and Executive Officer. The first three will represent a department of administrative activity, or point of control, the expense in relation to which will require to be ascertained periodically. For this purpose, the area of control will be indicated numerically as: 1000, 2000, etc.—Controllers; 1100, 2100, etc.—Directors; 1110, 2110, etc.—Section Directors (these being described as “Location Numbers”). The method is

familiar to all users of tabulating machinery as an adaptation of the "Dewey" decimal system of classification. I propose also to accept the conventional distinction (as regards cost of labour) between: (i) Operation or action: as comprising manual operations in relation to plant or product; (ii) Administration: as comprising all other and non-manual activities. Foremen, and those performing a controlling function in direct contact with producing or service units will be termed executive, and their remuneration separately classified.

We may now distinguish groups of functions and their control. My conception of the various groups and controls is somewhat as follows:—

(A) **CONTROLLER OF DESIGN AND EXPERIMENT** directing activities, for example, of separate Directors of Materials, Process and Product, Research Experiment and Design.

(B) **CONTROLLER OF PLANNING AND PERFORMANCE** responsible for conception and obtaining performance of complete output programme, to comply with the requirements of the Controller of Selling and Distribution, assisted by directors, as follows:—

(1) *Estimating and Cost Standards.* Director controlling Section Directors attached to each Operating or Service Division (other than Labour and Storage).

(2) *Specifications and Standards.* Director responsible for the provision of full formulæ process schedules, specifications, drawings, etc.

(3) *Orders and Requisitions.* Director responsible for preparation and issue of raw material schedules to Buyers, component delivery schedules to Works (showing quantities, dates, etc.), and issue of formal orders to Works and to Purchasing Officers.

(4) *Product Control and Efficiency.* Director responsible for arrival of raw material, comparison of issue quantities with standards, and maintenance of progress and deliveries by works, assisted by section directors, either attached to productive divisions or to store.

(5) *Inspection.* Director responsible for maintaining quality of material and product attached to producing divisions or Stores depots or groups, assisted by section directors, etc.

(C) **FACTORY OPERATION CONTROL** comprising general control of Factory operations in accordance with Production Control plan. Carried out by Officers as follows:—

(1) *Storage.* Director, assisted by Section Director, controlling in Sectional Stores depots, inward and outward movements of materials and components in accordance with authorisations and maintaining records for accounting purposes.

(2) *Transport.* Director, assisted by Section Directors, dealing with different classes of transport and including the handling of incoming and outgoing goods, and all interdepartmental movements.

(3) *Power.* Director, assisted by Section Directors, respon-

sible for the generation and transmission of steam power and lighting as requisitioned by departments.

(4) *Installation and Maintenance.* Director, assisted by Section Directors, responsible for maintenance, upkeep and repair of installation generally. Subdivided as between Buildings (repairs, fire prevention, etc.), Plant and Tools (Process Plant, Tool-room, etc.).

(5) *Labour.* Director concerned with engagement, transferring and discharging of employees (on requisition from Production, Service and other Directors) from executive rank downwards; for training, observance of factory regulations and statutory requirements. Assisted by Section Directors dealing with remuneration (such as rate fixers), welfare (as safety, ambulance, dining rooms, etc.), safety, process, returns, etc. Executive officers rank as foremen.

(D) **PRODUCTIVE OPERATING CONTROL.** This group will be divided into Producing Divisions under Directors having separate location numbers (as 4100, 4200), and these similarly subdivided into process groups under Section Directors numbered, *e. g.*, 4110, 4111. A producing division may be responsible for a complete product, or a series of stages only: process groups may comprise a "shop" (as a machine shop) or a process unit or number of like units. Thus Foundries would form a division: Iron, Steel and Brass Foundries "process groups." The general duties of Directors and Section Directors, as administrative officers, would comprise the supervision of operations, requisitioning for labour and services; maintaining flow of product of quality and in quantity demanded by Location No. 2310. Executive assistance would be given by foremen; other executives would be Inspectors, Job and Time Clerks, or Ratefixers, present for purposes of record and inspection. General responsibility for discipline, care of plant, observance of factory and statutory regulations will be on Directors and Section Directors, who will also be required to maintain costs at a standard level previously fixed by section 2100 (Estimating and Cost standards).

(E) **FINANCE CONTROL** (including Purchasing and Records). Controlling all financial and recording activities (in so far as they represent money values) assets and liabilities, income and expenditure; including the making of budgets or financial forecasts and the later comparison of actual results therewith. Operated by Directors and Section Directors, as under:—

(1) *Purchasing Director*, assisted if necessary by Section Directors for different classes of material. Responsible for knowledge of markets and for making and performance of contracts for materials of quality and types, and at dates, as fixed by schedules provided by Location 2310 in accordance with approved programme of production and expenditure. Operating materials will be purchased in accordance with approved programme.

(2) *Financial and Commercial Records.* Director responsible for maintenance of records, financial accounts and statements, and



budget statements; and reporting comparisons therewith. Section Directors as follows: *Impersonal Accounts*. (a) Loans and Capital Accounts. (b) Income and Expenditure. *Cash and Credits*. (a) Receipts. (b) Disbursements. *Debtors' Accounts*. (Sales) in groups. *Creditors' Accounts*.

(3) *Factory Accounts and Records*. Director responsible for maintenance of records, factory accounts and expenditure statements, process and product cost statements and comparisons, budget statements, and reporting divergences therefrom. Assisted by Section Directors dealing with: (a) *Disbursements* (other than wages) in detail. (b) *Materials and Stores Records* in detail. (c) *Divisional Operating Records*, prefixing significant numbers attached to Operating Divisions and maintaining divisional operating and production cost accounts and ledgers; preparing final costs and divisional accounts. (d) *Wages and Time*. Pay Roll preparation, State Insurance records, wages payment, general timekeeping. (e) *Controlling Accounts*. Records of inventory, installation values and fixed charges; Controlling Accounts for stock disbursements, overhead distribution and production costs, recoveries and credits for services and product delivered, in parallel with Divisional records. Final Works Accounts and Balance Sheet.

(F) CONTROL OF ADMINISTRATIVE OPERATIONS comprising (i) *Director of personal relations* (with Section Directors for (a) administrative staff records, (b) office management and regulations, etc. (ii) Legal and Correspondence Director with Section Directors as Registrar; Correspondence, etc.

(G) SELLING AND DISTRIBUTION CONTROL. Under this heading will be comprised all activities relating to selling and distribution of product, which will be the subject of separate treatment. The method of accounting for expense on the basis here outlined, though at first sight somewhat involved, is not really so in practice. Fundamental principles are (i) That every "Director" shall budget in advance for the amount of administrative expense anticipated over a period; (ii) That no charge shall be made to any location unless previously authorised or agreed to by the Section Director responsible, or by his superior. Consistently with this, standards of cost of product or service unit, or of process time and cost, are predetermined, and form the basis of recovery or charging out for product or services rendered by any operating section. Any surplus or deficit resulting marks an improvement or falling off in cost efficiency, which appears in the final monthly accounts to be accounted for—both for individual locations and for the factory as a whole—finished product being charged to the selling and distributing control at a predetermined total cost. For the past seven years I have been convinced that this method is essential to control.

Collection and allocation of expense is made by accounts grouped as follows:—

*Numbers 1 to 10—Raw Material Stocks*. In groups, there being a detailed code of commodities underlying these, where tabu-

lating machines are utilised. Groups indicate types of material, and not situation in store.

*Numbers 21 to 30—Finished Product Accounts.* In groups. Detail numbers (as subdivision of the account number) are used to indicate types, sizes, etc.

*Numbers 31 to 40—Special Order and Production Accounts.* Controlling work in progress of all types, in groups; may be found in any operating or service division; and are credited by transfer of finished cost to Nos. 21/30, or to Expense Accounts. Detail or subsidiary numbers indicate special order number—as—/31/124.

*Numbers 41 to 50—Installation Capital Values,* as 41, Buildings; 42, Roads and Railways; 43, Fixed Plant; 44, Rolling stock and transportation equipment; 45, Power transmission; 46, Loose tools and equipment; 47, Portable process plant; 48, Patterns, dies, blocks, etc.; 49, Fixtures and fittings; 50, Office furniture.

*Numbers 51 to 60—Maintenance Expenditures* as in previous group.

*Numbers 61 to 100—Operating Charges Generally.*

*Numbers 61 to 64—Fixed Charges:* 61, Rent, Rates, Taxes, Sch; 62, Insurance (Fire—Boiler); 63, Depreciation; 64, Interest.

*Numbers 65 to 79—Current Expenses:* 65, Gas, Water, Power and Light (purchased); 66, Carriage (inward); 67, Outward Carriage, Freight, Shipping Expenses and Insurance; 68, Postal services and charges; 69, Miscellaneous expenditures; 70, Stores and Supplies (debited from Materials issues); 71, Wages and 72, Salaries (Classified by abstracts of Pay Rolls, etc., as, production process direct and indirect, executive, administrative); 73, Commission; 74, Travelling expenses; 75, Professional fees and charges; 76, Insurance (State and Workmen's Compensation); 77, Patent Fees and Royalties; 78, Advertising and Publicity; 79, Trade Subscriptions and Donations.

*Numbers 80 to 90—Miscellaneous Accounts (Commercial):* 81, Interest (Trade); 82, Discounts; 83, Bad Debts; 88, Scrap and Spoilage; 89, Direct Cost Charges.

*Numbers 91 to 100—Service Accounts:* 91, Buildings and Space; 92, Plant and Installation; 93, Materials Service; 94, Transport; 95, Power and Transmission; 96, Labour; 97, Maintenance; 98, Operating Expense; 99, Administrative Expense; 100, Selling and Distribution.

These account numbers are used in conjunction with Location Numbers thus: 4011/74 represents Travelling Expenses; Foundry Manager; 4011/74/630 the same, in relation to a Work Order (No. 630); or 4011/89/630 Travelling Expenses treated as a direct cost charge to the Foundry against Works Order 630.

Alternatives and extensions will readily occur to you; the method outlined is but one of many; for example, the Location Number in the last instance may be replaced by a significant number indicating the process group controlled.

The accounting procedure of collection is, briefly, as follows:—

1. Controlling Accounts govern the whole of the Divisional Cost accounting records; and are kept in similar form.

2. Accounts (loose leaf, tabular form) are kept divisionally for each Location (administrative or operative) with headings as under (a) *Fixed Charges*—(i) Buildings; (ii) Installation. (b) *Current Operating Expense*—(i) Wages (other than charged to Works Orders or Maintenance A/cs.); (ii) Salaries: (a) Executive, (b) Administrative; (iii) Stores and Supplies; (iv) Current Expenses. (c) *Repairs and Maintenance*. (d) *Service Charges*—(i) Transport; (ii) Power; (iii) Labour; (iv) Administrative.

These columns represent charges more or less common to all classes or operation. On the credit side of the account there appears a column for amounts recovered by charge to other locations or to production, special or standing maintenance orders. Locations performing producing or service operations involving special, standing maintenance or production orders have a further form of record showing, as debits: (a) *Materials* (as issued and credited on A/cs. 1 to 10). (b) *Wages* (1) Direct (from Account No. 71); (2) Indirect (from Account No. 71). (As summarised from Time Records, etc.). (c) *Direct Cost Charges* (as recorded against A/c. No. 89). (d) *Transfers* (affecting accounts Nos. 31 to 40 and 51 to 60). (e) *Burden*. Representing amounts figured at predetermined rates per man-process or process unit hour, or per unit of product at process (whichever may be applicable) credited to the individual Location accounts separately as a recovery; and in total credited to Operating Expense Account and charged to the appropriate order account (as above).

Credits are shown for: (a) Value of finished product delivered (at predetermined cost rates) to stores (A/cs. Nos. 21/30): of units of service (power, etc.) delivered (at predetermined rates) and of maintenance orders completed. In these latter instances the credit here will be a charge to the respective service Accounts (93, 94, 95, etc.) in control which will be credited by charge to the Locations receiving the service. (b) Value of intermediate product transfers. (Credits and debits alike on A/cs. 31/40). These may be made at fixed values, or at cost; or (as in Engineering) no credit may be made until completed as a job.

On both sides of the Accounts appear columns for scrap and spoilage, the credit representing the full value transferred to A/c. No. 88, the difference after deduction of scrap value being recharged to the Location on the appropriate account number (31/40).

Locations operating expenses are charged as follows:—

1. *Fixed Charges*—Building and Space; Plant and Installation.

By credit to Buildings and Plant Service A/c. Nos. 91 and 92, on predetermined rates, based on floor space occupied, or plant values held as shown by inventory respectively. The Service Accounts are debited by closing A/cs. 61/64 in total. Administrative

Locations may or may not be charged for office space, but it is suggested that they should be.

## 2. *Current Operating Expense.*

(i) *Wages*: (where not charged to special or other orders) by crediting A/c. No. 71 and debiting Operating Expense Account in total: Locations in detail.

(ii) *Salaries*: Similarly—crediting A/c. No. 72.

(iii) *Stores and Supplies*: By credit to A/cs. No. 70 (previously debited from Materials A/cs. 1/10) in total and debit Operating Expense, Locations in detail from Stores issues records.

(iv) *Current Expenses*: A/cs. 65 to 69, 76 to 79, as affected, credited and total debited to Operating Expenses A/c. No. 98 details being charged to Locations from original documents, abstracts, etc.

## 3. *Maintenance.*

Special and standing maintenance order charges, as credited to the Location Cost Accounts controlling them, are: (i) Credited in total on A/cs. Nos. 51/60. (ii) Debited in total to Maintenance Service A/c. No. 97. This latter account is credited in turn with the amounts debited in detail to Locations chargeable, Operating Expense Account being debited in total.

## 4. *Service Charges.*

(i) *Materials Service*. Although not shown as an expense of operation, it is included in cost. Materials Service Account is charged with the Operating Expenses of all locations concerned with supply or storage of materials, and credit is given by adding to the value of each issue of material a predetermined percentage, the total amount being credited to this account. In summarising material issues this addition is totalled separately, but is debited as part of Material Cost. The Locations of which the Operating Expense is so included are the material sections of Product Control Group (24) of Inspection Group (25), all of Group (31) and Group (51) Purchasing; also Group 5320 (materials and stores records). In addition, inward carriage accounts will be charged to this account from account No. 66, as allocated to materials. In transferring Operating Expense of Locations the total will be credited to Operating Expense Account.

(ii) and (iii). *Transport and Power*. By charge from Operating Accounts of Transport (Group 32), and Power (Group 33) Locations (crediting their Operating Expense in detail, and Operating Expense Account in total), for the number of units of service supplied (as measured or computed) at predetermined rates. Installation and Maintenance (Group 34) is dealt with by transfer of the charges for repairs, etc., as previously explained.

(iv) *Labour*. Absorbs Operating Expense of Locations 5330 (Time and Wages) and Labour Group (3500). They are credited in detail, and Operating Expense Account in total; thereafter charges are made to Operating Service locations at a fixed rate per man-hour on all labour hours employed, the total amount being credited to Labour Service Account.

There remains now to deal only with Administrative Service Expenses. Within each "control group" the expense of the Controller's location will be distributed over the remainder (*e. g.*, pro rata to *personnel*); next, the expense of the Directors' Locations over their subsidiary Locations either as a fixed sum per head, or rate per man-hour on hours employed in the Division, or otherwise as equitable. Credits and debits will be made accordingly. Thereafter, all remaining administrative locations (other than those controlling producing or service divisions) will be credited with their total expense. Operating Expense Account being credited in total and Administrative Service Account debited. Simultaneously a credit will be made on Administrative Service Account, and a debit in total on Operating Expense Account (with debits in detail to all producing and Service Locations) at a fixed rate per man-hour for all men employed (productive, direct or indirect). Any balance then remaining will go forward as surplus or deficit to next period.

We have now remaining only those locations concerned with Product, Process or Service (power, transport, maintenance and storage). Against all these, and against the Operating Expense Account (No. '98) in total, credits have already been given by debit in detail and total to Production, Standing Maintenance or Special Orders Accounts (Nos. 31/40-51/60) and, through the Service Accounts 93 to 97 back to Operating Expense of other locations, at fixed rates of burden charge. Any balance on Operating Expense Account in total is reconcilable with similar balances (surplus or deficit) appearing at each location, and will be carried forward to the next accounting period.

It will be observed that distribution is always made, if possible, at "predetermined rates," and on hours (man-process, process unit (or machine), hours, etc.). Distribution as a percentage of labour cost is too erratic for consideration. Estimating and budgeting alike are based on this principle of predetermination, and I suggest that in the distribution of overhead (administrative or other) it is undoubtedly the best method to adopt.

Consideration of the remainder of our subject ("Selling and Distributive Costs") must of necessity be brief; but, in any case, brevity will be facilitated since the accounting methods and control will be as already explained, the Location Numbers falling within the "Control Group" 7000. Our range of account numbers will require extension, but as this will be inevitable, from the standpoint of the financial accounting, in order to provide for certain other purely commercial and financial aspects, no difficulty will arise. Nor will confusion occur in allocation of expense, this being governed by Location Numbers primarily. We may therefore assign account numbers 101 to 110 for sales of groups of product—in parallel with the "finished stock accounts;" 110 to 120 for Special Order costs also in parallel; 121 for Advertising Material Stocks. From an accounting standpoint we have to consider, in relation to sales: (1) Type or product—subdivided into size, horse-

power, etc.; (2) Market area—home, foreign, subdivision into territories; these divisions giving the distribution efficiency factor. We have next to consider the unit of sales—which may be quantitative, but which usually can only be expressed in terms of money—“pounds of sales.” Finally, we have to consider methods of (a) *Selling*, including the arousing of interest, personal contact with customers, and all that comprises the *making* of the contract; (b) *Distribution*, including transport, warehousing and storage, and actual delivery or *performance* of contract. Accounting for sales and book debts will remain a financial function, though in part carried out under the control of the Selling organisation. We have therefore to endeavour to ascertain the costs of (a) *Selling*; (b) *Distribution*; in relation to (i). A number of units of quantity, or value, of (ii) product of any particular type, in (iii) any given area or market. Analysis of sales accounts (invoices in detail summarised and tabulated) will give (i), (ii) and (iii). Costs of Selling and Distribution will be arrived at under the accounting system already laid down. Though I have great admiration for the work of the salesman, it must be admitted (in the cold, hard light of economics) that his operations are those of an individual, directed by other individuals, in performance of certain definite functions. These functions again, for control purposes, must be grouped; and this grouping will depend on the area of operations and the nature of the product. We will assume both home and foreign sales with branch offices, agents, stores or depots; but excluding the operation of retail shops in addition. We may therefore have an organisation somewhat as follows:—

*Controller of Selling and Distribution* assisted by: *Assistant Controllers* (i) Home, (ii) Foreign, (iii) Distribution; *Director of Publicity and Advertising*.

*Assistant Controllers'* functions are arranged as under:

(1) HOME. Assistant Controller with:

(a) *Tenders and Estimating Director* assisted by Section Directors dealing with Product groups.

(b) *Director of Salesmen and Agents* assisted by Section Directors controlling divisions which may represent either Territories or Product groups—according to the Selling plan and methods.

(c) *Director of Branches* assisted by Section Directors controlling the Branches themselves (as Branch Managers) or being concerned at Head Office with the operations of certain Branches.

(2) FOREIGN. Organised similarly.

(3) DISTRIBUTION.

(a) *Storage and Warehousing*: Assistant Controller with Director assisted by Section Directors in charge of separate stores or depots. These may be regarded as serving a particular territory, or as handling a product group, according to the facts.

(b) *Transport*: Director with Section Directors for (i) Inland Transport and (ii) Marine and Foreign Transport.

In these instances distribution will be made over product, quantity handled, or special order in suitable cases.

## ADVERTISING.

The Director of Advertising will formulate advertising schemes and plans (Home and Export) to be considered in conjunction with the Assistant Controllers and the Controller. Section Directors may be (i) Press Advertising; (ii) Poster Advertising; (iii) General Advertising, Catalogues, etc. They will have as assistants, artists, copywriters, publicity and circulation experts, etc. Advertising charges will be concerned chiefly with product groups either alone or in relation to area covered by advertising. Special advertising will also be covered by Special Orders, where necessary.

Co-ordination will be necessary as between all sections, and must be maintained particularly as between salesmen and branches (receiving orders) and transport and distribution (despatching). Where (as in engineering) product is identifiable and is to be packed, packing will be done and charged against the special order which indicates the particular contract. In other cases, the cost of goods to the Selling Controller is full works cost, including packing.

Collection of expense having been made, and distribution of all administrative expense to locations effected (as previously described) transfers may be made to the Sales Accounts (debit) or Special Order Cost Accounts in total. Methods of allocation may be either on a predetermined rate per unit (quantity or value) or by actual apportionment over total units or value of product sold, according to type. Advertising, in part, may be distinguished in relation to product or territory (by addition of detail numbers to the Advertising Account or other Expense Account numbers concerned) when expense is initiated; otherwise it must be distributed as above mentioned. Salesmen, agents and branches ("field"), totalled according to territory, may be charged to Sales Accounts according to total sales of each product group (units or values) in each field. Storage will be distributed according to whether stores are regarded as part of "field" expense or have relation to product groups. Transport may be charged to special orders so far as possible (*e. g.*, sea freight, insurance, import duties, etc., on special items such as engines) or otherwise according to quantity of product group handled.

The total expenditure on special orders (including cost of product) will be transferred to the Sales Accounts carrying the credit for the relative sales; expenditure from Locations, distributed as previously mentioned, being also transferred to the relative sales accounts (to which "cost of product sold" will have been debited already, as received and delivered to customers). The difference between total sales and total charges on Sales Accounts will be the "net margin" out of which certain further expenses (discounts to customers, bad debts and interest) must be provided. The exact treatment of Discounts and Interest is a matter on which two opinions exist; my own view is that it is not a selling *expense* in relation to product, but a matter of use of money. The total

cost of sales as shown on the Product Group Sales Accounts will now include cost of product, advertising, selling ("field"), storage and transport. Where the products are sufficiently homogeneous (within each group) to have a common quantitative unit, the cost per unit of all factors of Selling Cost is thus obtainable—the number of units sold being available from statistical records—and in all cases the factors of cost may be expressed in terms of value units, or "per cent. of turnover."

MR. ANDREW STEWART

It gives me great pleasure this morning to follow Mr. Higginbotham on this important subject. In this matter, we are, I think, sailing through uncharted seas.

*Treatment of the subject.*

Before going too deeply into the subject, I should like to make my attitude quite clear with regard to certain matters upon which considerable difference of opinion exists.

The first is, that I have always felt that the cost of administration, and the cost of selling, representing as they do the two distinct, though closely allied functions of control and distribution, require to receive individual treatment by methods appropriate to the different circumstances. I think that the expression "Administrative Cost" evokes in the mind of each of us a very similar conception, and any variations can only be such as will have little effect on the problem. It conveys to us, I think, the cost of the service of administering the business as a whole, and accordingly must cover both the production of the article and the distribution thereof, and the truest reflex of the position is not obtained by regarding administration as a function apart from producing or selling, but rather that it may be, and generally is, most intimately connected with both functions, and should be so apportioned, although any allocation should be made in such a way that the identity is not obscured.

*Selling Costs and Costs of Production.*

The second point I wish to clear up is, that there are Cost Accountants to-day who regard the question of Selling Costs as being extraneous to the cost of production, and accordingly outside their sphere of accountability. That is, I submit, a view that we cannot accept, and if Cost Accountants are going to occupy their real place in industry, and give satisfactory service, it is their duty to render accurate and informative account of every phase of expense of the firm's activities in relation to the output. The well-worn phrase of the economists is of equal application to ourselves, namely, that "The act of production is incomplete until the goods are in the hands of the consumer." The straining after accurate and reliable manufacturing costs tends to dominate the situation to the danger of obscuring the importance of other matters, although I do say this, and say it most emphatically, that no methods of controlling or allocating sales expense can ever be really complete, unless built up against a background of accurate and suitably



arranged manufacturing cost data. To not a few business men the importance of controlling distribution costs is greater even than the question of controlling manufacturing costs.

So much for these difficulties which, like most differences among Cost Accountants, are due largely to misunderstandings arising from the endeavour to express in non-technical language terms referring to a highly technical science. My economist friends will understand what I mean!

*Importance of Selling Costs.*

The Council are to be commended for bringing the subject of selling costs prominently before you. The importance of the problem in individual cases is of course relative. With some of you—in your own personal experience—it may be a comparatively small matter, and call for little or no comment whatever, and this is particularly so in the case of many firms engaged in key industries. I am thinking of the coal trade and the iron and steel trade. On the other hand, there are firms to whom the question of selling expense is of great moment, involving considerable anxiety as to how to treat the matter in the best possible way in order to provide information for effective control and for guidance in price-fixing. Matters may also be complicated by the fact that not a few firms to-day sell all or part of their output through central selling organisations, or under arrangements of price maintenance involving complicated schemes of rebates and trade discounts.

Whatever be your experience, however, I am sure you will agree that the question of selling costs has received but scanty attention. It is the "Cinderella" of cost accounting.

*Distribution Costs.*

The high cost of distribution is an outstanding feature of modern commercial conditions, and is a problem which has grown along with the development of the commerce of this country. We have been so intent on the manufacturing aspect of industry that selling and distribution costs generally have been relegated to the background, but are now so important that it is no longer possible to ignore them. We are a people who must live principally by exports, and if this country is going to retain her position in world trade, she must develop to an increasing extent her markets beyond the seas. This means that the problem of distribution costs is going to be one of still greater importance, and the time is now more than due when the matter should receive our most careful consideration and research.

That each Cost Accountant must grapple with his own peculiar difficulties there can be no doubt, and it is not a matter upon which generalisation is either safe or helpful. The complexity of the individual problem will be more or less controlled by the nature of the output sold as regards variety of type, value, the manner and area of distribution, and the character of the selling organisation. The variety of type product is the most important factor. The simplest case would seem to be that of a concern manufacturing a single line of goods, and even here the problem presents diffi-

culties which are influenced by the whole consideration of the question, and by reason of the fact, for example, that the reward to immediate selling effort may be, and very often is, postponed and the correlation of cause and effect is generally hard to trace.

#### *Allocation of Sales Costs.*

The problem becomes much more difficult and involved when we come to the highly complex case, not uncommon in this country, of a firm whose output consists of literally thousands of different items, the distribution of which may be world-wide. The present general practice in the matter of allocating Sales Costs is to segregate these over a period and express the total as a percentage on the total sales for the same period. Far from condemning this method, I regard it as a progressive step. Though perhaps feeble, it is nevertheless some recognition that special treatment of Selling Costs is necessary. A little reflection, however, shows us that this method takes little cognisance of the actual facts of the case, and yields no material for the control of Sales expense. There are, as we know, orders which come in more or less automatically from good friends, orders which the actual counting-house expense is relatively small, and there are other orders which cost us so much to obtain that we should be better off without them.

#### *Control of Salesmanship.*

It is said that the onlooker sees most of the game, and it is surprising to see executives demanding every means of control of manufacturing expense, which is more or less under their direct observation, and at the same time to know that the same men are content to maintain expensive selling forces in the field, without any effective control, and it is not unlikely in many cases that the savings through works efficiency and low cost are lost in selling.

There are several aspects of salesmanship which should be considered from the point of view of control, and the two most important are (1) the volume and nature of the sales obtained, and (2) the cost of obtaining these sales. Methods of remunerating salesmen and agents cause maximum sales to be their principal object, and the danger will always exist where selling expense is uncontrolled, that a considerable portion of the sales figure is obtained at exorbitant cost.

#### *Recognised Selling Cost.*

It might be helpful at this stage to consider what is recognised as selling cost, and the undernoted is a representative list. In individual cases the details will vary, but the problem is not vitally affected thereby:

1. *Head Office*—(a) Salaries and Expense of Sales Order Department; (b) Salaries and Expense of Invoicing Department; (c) Proportion of Administrative Expense.
2. *Branches, Agencies and Travellers*—(a) Salaries and Commission; (b) Office Expenses; (c) Travelling Expenses.
3. *Publicity Expense*—Advertising, catalogues, etc.

#### *What a System must provide.*

Whatever system be devised for dealing with Selling Costs

it is fairly obvious that it must provide for: (1) The means of control of the selling organisation. (2) A method of ensuring that the selling price is correctly fixed in relation to the cost not only of manufacturing but including distribution also.

The current Selling Costs can scarcely of themselves be of immediate value for price fixing purposes as the fluctuations would be such that their use along with current manufacturing costs would be entirely impracticable—nor would they be of particular value for the purposes of control unless it is possible to effect comparison with predetermined standards.

It is along the line of fixing standards not only of cost of selling but also of estimating the volume of sales that the most sound and practicable attempts at the solution of the problem of selling cost allocation and control have been made.

#### *Budgeting of Sales.*

These methods depend for their success on the accurate budgeting of sales. The figure when determined is usually regarded as representing a total number of points for the year. This total is allocated in monthly quotas to districts and the district figures subdivided for individual salesmen. The quotas are arrived at from past records of the business done and the present or prospective trade conditions in the field. Where possible it is highly desirable that the budget should be detailed to show separately the individual lines and/or grades of the product. This information is essential because of the differential margins of profit on different grades of goods.

The budgeting of sales is not uncommon as many large specialty manufacturers are in the habit of figuring out estimates for their manufacturing and distributing programmes.

#### *Standards of Sales Cost.*

The fixing of standards of Sales Cost is a more difficult matter. The classification and methods employed will depend to a large extent on the variety of type sold and the nature of the selling organisation.

In any case, if suitable data does not exist then years of groundwork may be necessary before reliable standards can be evolved. Keeping in mind the dual purposes of price fixing and control, it would seem that the most useful information could be derived by the classification of selling expense by lines of product and, if possible, by lines of product in each district.

To do this a careful study of the component factors of selling costs will be necessary.

#### *Divisions of Selling Costs.*

Not unlike factory costs the cost of selling falls into two main divisions: (1) Expense of a general nature which resembles "indirect charges;" (2) Expense capable of specific application of types of products which resembles "direct cost."

Constituting the former (the indirect cost) are the proportion of Administrative Charges applicable to selling and the general costs of sales orders and invoicing departments. Constituting the

latter are Salesmen's Salaries and Expenses and such other advertising costs as can be directly allocated to products. The indirect Selling Expenses would, of course, be pro-rated to the Direct Expense.

#### *Allocation of Direct Expense.*

The allocation of the items of direct expense to type of products will demand careful investigation and may be a big task, but if standards are to be fixed this must be accomplished.

It will be necessary for each Salesman to estimate and report the time occupied on each type of product whether sales are forthcoming or not. For the purpose of control calls should be analysed so that the report will show the number and cost of calls of a promotive character, *i. e.*, calls developing business. Where of course each salesman is selling only one style of product the problem will be rendered much simpler as a single unit basis will be available.

#### *Advertising Costs.*

With reference to the cost of advertising, this will be both direct and indirect in its incidence. "Direct" inasmuch as the expense may concern a particular product and "indirect" where the advertising is of a general nature. The latter should be pro-rated over the total sales or dealt with specially if a big campaign.

#### *Adjustment.*

The selling expense now being allocated to products, the figures should be adjusted to a yearly basis and therefrom standard rates should be evolved in relation to the budgeted figure of sales for each type.

Thus having obtained standards for the cost of selling each type we have now information which is both useful from the aspect of sales control and for price-fixing purposes.

It enables the manufacturer to observe his sales force from the positive aspect of volume of sales by comparing the actual against the quota and from the negative aspect of the cost of securing these sales by comparing the current cost of selling against the standard.

#### *Standards for Comparison.*

Where it is not possible to arrive at standards of Selling Expense for each type of product it may still be possible to arrive at standards for the various heads of cost, and considerable ingenuity can be applied in securing standards for effective comparison, *e. g.*, cost per call and cost of office expenses per item.

In further development of the standard idea, some manufacturers evolve what they regard as a standard cost of production, and debit up to branches, and through branches to salesmen, the standard cost of the product, at the same time fixing a price which will enable the branch to sell at a reasonable profit, and in this way the manufacturer is able to observe the efficiency or otherwise of the branch on a basis of profit or loss. It should be observed, however, that the standard cost decided upon must, of necessity, be based on the budgeted figure of sales. On the budgeted figure of sales the whole success of this method depends.

In any system of sales control the budget may require to be adjusted by reasons of seasonal trade. In the same way it is necessary to draw up some scheme in order to provide for the varying conditions and circumstances under which Salesmen operate as it would be absurd to judge the efficiency of all travellers on the same basis.

The sales quota method properly applied is also helpful in fixing fair bases of remuneration and is sufficiently elastic to meet the varying conditions in the field and to enable difficult ground to be worked while still giving the Salesmen sufficient encouragement.

#### *Comparing Methods of Selling.*

A further useful purpose is the comparison of different methods of selling with a view to the selection of the most efficient, *e. g.*, whether by branch offices, agents, travellers, central selling organisations, etc.

#### *Administrative Costs.*

To deal now with the cost of administration. Actual details are not of great moment, but briefly stated administrative costs should include: (1) Salaries of Directors, Secretary, Accountant, Cost Department, and other office salaries; (2) Office Rent, Rates, Lighting, Stationery and other expenses; (3) Ordinary Legal and Accounting Services.

#### *Allocation.*

As already indicated, the cost of administration must, in the first instance, be apportioned between Manufacturing Costs and Selling Costs. In making this allocation considerable discretion is required, and I have always found it most helpful to get each member of the staff to prepare an analysis of his time, and on this basis *pro rata*, such other expenses as cannot be specifically earmarked as being entirely connected with either production or distribution. This will form a basis for making the necessary allocation between Manufacturing and Selling Costs, and will also afford suitable data in considering the further distribution to departments or processes. The problem is generally not one of any magnitude, and an inquiry into the circumstances of each case will scarcely fail to reveal a suitable basis for allocation. It often happens that there are departments which bear no comparison to each other, either from the point of view of unit manufactured, or of wages on materials cost. For example, coal mines is one department and iron and steel works is another department, and of course, there is no common basis. Under such circumstances arbitrary allocation must be made between such departments and the further subdivision carried out on the basis of some common unit factor. It is necessary, however, not to lose the identity of Administrative Costs, and in order to show the real Factory Costs it should be, wherever possible, treated separately and regarded as a cost additional to Factory and Selling Costs. The value of this will also appear when considering price cutting, as administrative cost comes under the heading of "Standing Charges" and is seldom subject to any real fluctuations, so that in times of stress it might

be found worth while to accept orders which, though they do not cover the total manufacturing cost, do make some contribution towards standing charges. I do not consider it wise to allocate administrative cost as a percentage on direct labour cost without a proper inquiry into the circumstances, as the labour factor, whilst generally the most convenient, does not always truly represent the work factor of the department, and consequently the true amount of supervision required.

Under certain circumstances, it might be possible to analyse Administrative Cost as representing the several functions such as the purchase of material, the administration of wages, and so on, to apply the cost of these functions to the production factors which they represent, namely, labour and material, and so express these in relation to the labour and material values passing through each department. Each head of expense must be considered individually in relation to each department or process; although generally speaking the allocation of Administrative Costs is more or less a matter calling for wise exercise of judgment in each case, and arbitrary allocations may prove, in the end, to be the most accurate.

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