CHART II.

ALLOCATION OF OPERATING EXPENSES TO FUNCTIONAL GROUPS.

Operating Expense Headings	Total Expense		Percent of total expense by functional groups					
	Dollars	Percent of total	Investment	Storage	Physical Handling	Order routine	Reimbursement	Promotion
Financial expense	$14,746	$29.20	8.39	–	–	–	20.81	–
Selling expense	16,024	31.73	–	–	–	22.79	–	8.94
Buying expense	1,757	3.48	2.31	–	–	1.17	–	–
Warehouse expense	9,585	18.98	4.92	6.04	8.02	–	–	–
Delivery expense	2,904	5.75	–	–	5.75	–	–	–
Office and administrative expense (directly distributed)	389	.77	.77	–	–	–	–	–
Total Distributed Expense	$45,405	89.91	16.39	6.04	13.77	23.96	20.81	8.94
Undistributed office and administrative expense	5,095	10.09	1.84	.68	1.54	2.69	2.34	1.00
Total Expense (Percent of total)	–	100.00	18.23	6.72	15.31	26.65	23.15	9.94
Total Expense (Dollars)	$50,500	–	$9,206	$3,394	$7,731	$13,458	$11,691	$5,020

ment expense for this item. Item B, on the other hand, represented 12.37 per cent of total inventory value, and by the same method it is found that the investment cost for this item is $1,139.

In the same manner, it is found that Item A occupied 18.33 per cent of the warehouse space which translated in dollars represents a storage cost chargeable to this item of $622. Item B, on the other hand, with only 8.55 per cent of warehouse space had a storage cost of only $290.

By the same methods, the other group expenses are assigned to these commodities enabling a total distribution cost to be compiled for each item. As shown, the total annual cost of handling Item A was $4,293 or 8.5 per cent of total expenses of the business. For Item B, the total cost was $4,838 or 9.58 per cent of the total cost incurred by the firm.

We are now in a position to compare these cost figures with the total sales and the gross margins for the respective items and to determine the net profit or loss on each. These comparisons are given in Chart IV. Here it will be seen that Item A with sales of $36,720 or 12.24 per cent of total sales had a gross margin for the year of $4,275. Expenses for this item, however, amounted to $4,293 as determined in Chart III and, hence, there was a net loss of $18 on that commodity. Item B, on the other hand, had a smaller sales volume of only $29,820 or less than 10 per cent of total sales. Its gross margin was $6,110 against which we have allocated expenses of $4,838 leaving a net profit of $1,272 or 4.27 per cent of its sales value.

The figures on these two items indicate that while profit relations for Item B are apparently satisfactory, those for Item A are unsatisfactory. For this latter commodity, either the gross margin needs to be increased or the expenses need to be reduced. By tracing back to the particular expenses which run up the total costs of handling such an item, it is frequently possible to find ways of making savings which will turn a losing commodity into the profitable column. At least such an analysis serves a notice on the management that all is not well with particular commodities, some of which, as in the case of Item A, may be important volume producers. Once this condition is clearly recognized, it is usually possible for the management to take steps to correct them to some extent at least.

It is my hope that the preceding presentation may have simplified for some people the process to be gone through in distribution costing. The process is not nearly so difficult as many firms have supposed. While it requires at the start a number of factors not ordinarily compiled, these are all readily obtainable. Once the system is set up, the compilation of the costs becomes largely routine which can be handled for the average firm with very little added expense. It is a type of information which the distributor of the future is going to find absolutely necessary, and those who are making use of it today are finding themselves in an advantageous position compared with their competitors.

The present discussion has related entirely to the distribution costs of the wholesaler. The same or similar principles apply in the case of the distribution costs of the manufacturer and of the retailer. There are, of course, some differences in details and in the factors used.

Paper presented before a meeting of the Taylor Society on Marketing Costs, arranged by the American Marketing Society, New York, December 9, 1932.

CHART III.

ALLOCATION OF FUNCTIONAL GROUP EXPENSES TO INDIVIDUAL COMMODITIES.

Functional Expense Groups	Factor used in allocating costs to commodities	Total expense to be allocated (from chart II)	Item A			Item B		
			Percent which Item A forms of total of each allocating factor	Total Allocated Expense for Item A		Percent which Item B forms of total of each allocating factor	Total Allocated expense for Item B	
Maintenance								
Investment	inventory value	$9,206	3.41	$314		12.37	$1,139	
Storage	warehouse space	3,394	18.33	622		8.55	290	
Movement								
Physical handling	no. of standard units	7,731	8.82	682		13.88	1,073	
Order routine	no. of invoice lines	13,458	6.06	815		4.17	561	
Contact								
Reimbursement	Percent of total sales	11,691	12.24	1,431		9.94	1,162	
Promotion	Percent of gross margin	5,020	8.54	429		12.21	613	
Total Expense		$50,500	–	$4,293		–	$4,838	
Percent of total expense		100.0	–	8.50		–	9.58	

CHART IV.

NET PROFIT OR LOSS BY COMMODITIES.

	Sales		Gross Margin			Expenses		Net Profit	
	$	Percent	$	Percent of gross margin	Percent of total sales	$	Percent total expense	$	Percent total sales
Item A	$36,720	12.24	$4,275	8.54	11.64	$4,293	8.50	-$18	-0.05
Item B	29,820	9.94	6,110	12.21	20.49	4,838	9.58	1272	4.27
Total	$300,000	100.00	$50,040	100.00	16.68	$50,500	100.00	-$460	-0.15