

# MACHINE METHODS OF ACCOUNTING

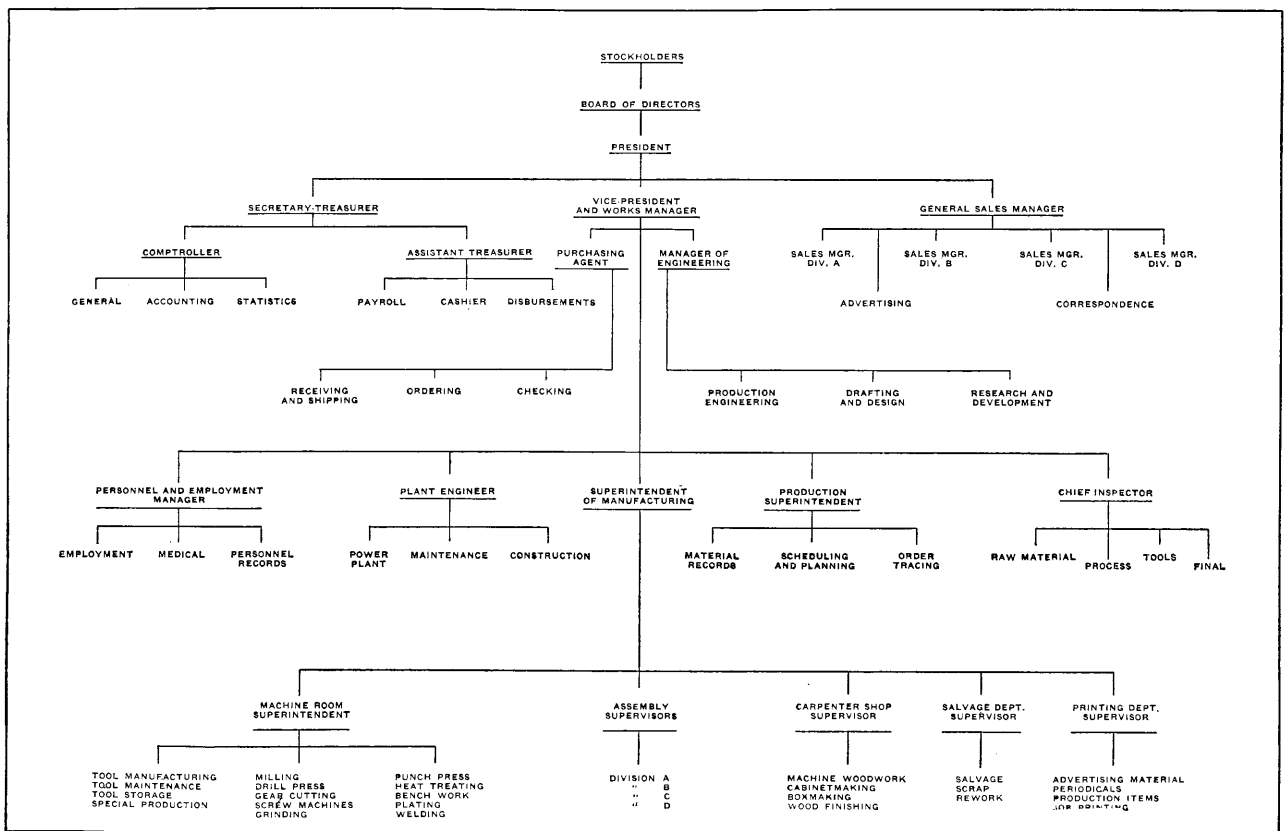
## APPLICATION OF MACHINES TO ACCOUNTING FUNCTIONS

THE nature of business is characteristically complex. The growth in volume of transactions and size of organizations through merger and expansion were accompanied by an increased number of managerial problems and responsibilities. This growth of business necessitated the division of management control among several executives so that proper attention might be accorded to each of the many operating problems which arose. Specialization made its appearance—a specialization based upon functions. Each executive was called upon to serve in a particular field, such as Selling, Manufacturing, Engineering, Purchasing, or the like.

Accounting record-keeping followed similar lines of division as a matter of course. The establishment of numerous auxiliary accounting records in addition to the summary en-

tries of general accounting proved to be necessary. These records were essential to furnish the summarized figure-facts that would satisfy the requirements of each functional executive for scientific or "planned" business management.

The nature of these various accounting subdivisions, together with a brief description of the International Electric Bookkeeping and Accounting Machine Method of obtaining the desired results is presented in this booklet. A full explanation of the details of the application of International machines to each specific problem is impossible because of limitations of space. The illustrations and text are included in this book only to indicate a part of the scope of the uses to which these machines have been adapted.



INDUSTRIAL ORGANIZATION CHART

*An illustration of the division of authority and responsibility in a typical manufacturing business.*

General Accounting

Events move swiftly today. It has become increasingly important that the general accounting books be closed promptly at the end of the month, and that the balance sheet and profit and loss statement be available as early as possible. Such practice makes possible exact knowledge of the accomplishments of the month just passed in time to use that knowledge in planning the current month. The gain of even a few days is important. Under the Electric Accounting Method the preparation of the earnings statement and the balance sheet has been speeded up from one to twenty days, as compared with previous methods.

The trend in accounting procedure has been to segregate detail accounts in subsidiary ledgers, leaving the general ledger essentially a series of controlling accounts.

ance in each account. These summary cards can be combined with the detail charges and credits for the succeeding month, to obtain a new monthly balance. Subtraction is performed automatically by the Electric Bookkeeping and Accounting Machine.

Following the tabulation of account totals, the cards are replaced in the machine and listed to print the account, reference number, and amount punched in each card. This detail listing serves to support the totals printed in the previous tabulation by account. It is preserved as a permanent reference.

Any special analyses and subsidiary statements which may be desired are easily prepared. The proper cards are selected by the

GENERAL ACCOUNTING																														
DATE			SOURCE	VOUCHER NO.	REQUISITION NO.	VENDOR	BRANCH	DEPT.	JOB OR APPROPRIATION		ACCOUNT		COMMODITY	UNIT OR CLASS	QUANTITY OR HOURS	AMOUNT														
MO.	DAY	YR.							MAIN	SUB.	MAIN	SUB.																		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1									
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2									
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3									
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4									
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5									
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6									
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7									
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8									
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9									

The use of punched tabulating cards for subsidiary detail is well established, as briefly described in the succeeding pages of this booklet. The automatically prepared summary or total cards resulting from these procedures become available for general ledger accounts and the automatic preparation of the balance sheet.

At the close of the month all general ledger cards are sorted by account number and tabulated to prepare the entries to the general ledger accounts. At the same time a summary card may be punched each month, showing the bal-

ancing machine, and the supplementary reports are tabulated. The most important of these is the operating statement.

Whenever reference is made in these pages to summary cards or balance-forward cards, it should be understood that these are punched automatically during the process of tabulating the detail cards. The summary cards are therefore by-products of the tabulated report, obtained with practically no separate expenditure of time, and assured of being in agreement with the detail cards.

The detailed procedure followed in the preparation of financial statements and ledger records of any company may be modified to extend the basic principles of machine use to the preparation of consolidated financial reports for corporations which control many subsidiary operating companies. The accounting procedures which are involved in the summarizing of records for the preparation of such holding com-

pany financial statements may be simplified by the use of automatic accounting machines.

A further advantage of the application of Electric Bookkeeping and Accounting Machines is derived from the facility with which detailed lists may be printed to permit the preparation of subsidiary ledger records and transaction registers. These may be prepared according to any sequence that will simplify the subsequent auditing routines.

TRIAL BALANCE				BALANCE SHEET			
ACCOUNT	DEBITS	CREDITS	DEBITS	CREDITS	ASSETS		
TOTAL FIXED ASSETS	1 00	16 500 17		16 500 17	FIXED ASSETS	133798	
TOTAL DEPRECIATION RESERVE	4 00		3 100 29		RESERVED FOR DEPRECIATION	Net Fixed Assets	
MERCHANDISE INVENTORIES	1 000	10 000 24		10 000 24	MERCHANDISE INVENTORIES		
MATERIALS & SUPPLIES	1 400	2 000 16		2 000 16	MATERIAL & SUPPLIES		
ACCOUNTS RECEIVABLE-N.Y.C.	1 611	5 000 17		5 000 17	ACCOUNTS RECEIVABLE		
ACCOUNTS RECEIVABLE-CHGO	1 621	5 000 18		5 000 18	NOTES RECEIVABLE		
NOTES RECEIVABLE	1 800	2 000 19		2 000 19	RESERVE FOR BAD DEBTS		
RESERVE FOR BAD DEBTS	1 901		1 00 20		ADVANCES TO EMPLOYEES		
SPECIAL RESERVE	1 902		3 50 21		CERTIFICATES OF DEPOSIT		
ADVANCES TO EMPLOYEES	2 200	2 50 22		2 50 22	CERTIFICATES OF DEPOSIT		
CERTIFICATES OF DEPOSITS	2 501	5 00 23		5 00 23	CASH IN BANK & ON HAND	398073	
CASH IN BANKS	2 801	10 000 24		10 000 24	Net Current Assets		
CASH IN BANK-SPEC. ACCOUNT	2 805	5 00 25		5 00 25	DEFERRED CHARGES	Net 135714	
CASH ON HAND	2 808	5 00 26		5 00 26	LIABILITIES		
PREPAID INSURANCE	3 702	5 00 27		5 00 27	CAPITAL STOCK		
PREPAID TAXES	3 704	2 00 28		2 00 28	LESS UNPAID		
EQUIPMENT ON RENTAL	3 708	4 00 29		4 00 29	DEMAND NOTES		
PREPAID ADVERTISING	3 714	2 50 30		2 50 30	ACCOUNTS PAYABLE-N.Y.C.		
CAPITAL STOCK	5 000		1 500 31		ACCOUNTS PAYABLE-CHICAGO		
SUBSCRIPTION ACCT. UNPAID	5 300		5 00 31		ACCURUED LOCAL TAXES		
DEMAND NOTES	5 600		5 00 32		COUPON ACCOUNT		
ACCOUNTS PAYABLE-N.Y.C.	6 000		2 400 49		ACCURUED INTEREST		
ACCOUNTS PAYABLE-CHICAGO	6 200		5 000 34		SALARIES & WAGES		
ACCURUED LOCAL TAXES	7 002		2 50 35		BURPLUS		
COUPON ACCOUNT	7 004		3 50 36		ADJ. TO SURPLUS		
ACCURUED INTEREST	7 005		4 50 37		PROFIT AND LOSS		
SALARIES & WAGES	7 009		5 00 38		DIVIDENDS PAID		
BURPLUS	9 000		1 500 39				
ADJ. TO SURPLUS	9 100		6 00 40				
PROFIT AND LOSS	9 400		1 490 41				
DIVIDENDS PAID	9 600						
	90 168						
			90 168	Dividends Paid			
					5 455 275	5 455 275	
					TOTAL ASSETS	TOTAL LIABILITIES	

GENERAL LEDGER DETAIL						
MONTH OF July 193						
ACCOUNT	SUB-ACCOUNT	INVOICE OR VOUCHER		DEBIT AMOUNT	CREDIT AMOUNT	
		NUMBER	DATE			
1	106	01	1024	21	327	
1	106	01	321	08	1200	
1	106	01	626	17	1000	
					2527*	
1	106	05	1452	30	9100	
1	106	05	1097	25		17250
						8150*

### Material Accounting

Accounting for materials is acknowledged today to be no less important than the final accounting for the balance sheet and profit and loss statement. The prevalence of standard costs, including material, labor, and expense, is sufficient evidence that control of these principal elements of expenditure is essential to profitable operation. Adequate control requires that material records be kept in detail, showing the specific material used, the particular job or product charged, and the cost. If standard costs are used the variance should be available by item as an aid to future planning. In addition to these operating records, material accounting should provide accurate statements of the capital invested in materials. These requirements call for precision in the compiling of a voluminous amount of detail. The Electric Accounting Method accomplishes this very effectively.

Materials are issued by storekeepers only upon presentation of a formal requisition, properly filled out and authorized. These requisitions may be tabulating cards, showing the information in both written and punched form. The information includes unit price, extended amount, and job or account charged. Parts requisitions may contain labor and expense amounts also, thus furnishing complete order costs for processed parts. The written cards, signed by the storekeeper, are forwarded to the records department.

The written information is punched in the requisition cards. No computation of extensions is required since these can be both computed and punched automatically. Daily or periodically, the requisition cards are tabulated with the inventory and receipts cards to obtain a re-

MATERIAL BALANCE										MATERIAL RECEIVED									
MATERIAL REQUISITION										SERIAL NO 49033									
DATE	VENDOR		DATE	DEPT CHARGED		ORDER NO		ACCT		PART NO		INVT		QUANT		AMOUNT		AMOUNT	
MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA	MO. DA
0000	0000	0000	6/14	21-40	214	54361	214	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
1111	1111	1111																	
2222	2222	2222																	
3333	3333	3333																	
4444	4444	4444																	
5555	5555	5555																	
6666	6666	6666																	
7777	7777	7777																	
8888	8888	8888																	
9999	9999	9999																	
1234567	1234567	1234567																	
ORDER NO 54361    ACCOUNT 214    DATE 6/14    DEPT CHARGED 21-40 PART PRICE OR PATTERN NO 4-62141-A 312 INVT GROUP 12-20    QUANTITY 210 PRICE .06    AMOUNT 12.60 DELIVERED BY L.A. Perkins    RECEIVED BY John Drury CHECKED BY C.A.B.										DELIVER FOLLOWING MATERIAL Brackets #6 DATE WANTED 6/14									

A tabulating card is punched for each item of material in stores—raw materials, semi-finished parts, and supplies. The cards which show a complete description of the item, its cost, and the quantity in stock, are placed in an inventory file. Other tabulating cards are punched for subsequent receipts of material, showing item identification, quantity, and amount. These too are placed in the inventory file by item number.

port of the stock position. All deductions and additions are computed automatically by the machine and new balances are printed. Summary cards, punched during the tabulation, represent the new balances of each item in stock, and these constitute the materials inventory file for the opening of the ensuing period. This file supplants the materials ledger—usually posted manually—since the card file is itself a complete record of the status of materials.

After the preparation of new balance cards, the direct materials requisition cards are available for sorting and tabulating for the work-in-process accounts.

In many organizations, indirect material is budgeted and actual amounts are measured against budgeted amounts periodically, sometimes even daily.

The indirect materials requisition cards are

sorted by department and account and tabulated with budget master cards to prepare the budget report, showing actual and budgeted amounts, and the variances from budget. Summary cards, produced during this tabulation, are used to make journal entries for expense materials. The detail cards are then released to prepare various distribution analyses, and are finally filed for future use in preparing statistical reports.

MATERIAL RECORD									
PLANT NO. <u>3</u>				MONTH OF <u>July</u> 19 <u>3</u>					
MATERIAL		MAXIMA	MINIMA	RECEIPTS	DISBURSEMENTS	QUANTITY BALANCE		AMOUNT BALANCE	
CLASS	ITEM								
20	101	4000	2000	250	1280	2340	247	16	
20	102	800	500	127	342	702	74	25	
20	103	1000	600		841	257	104	19	
20	104	200	50	55	129	243	126	37	
24	201	6000	2200	476	3152	3105	491	08	
24	203	4500	2000	1507	1680	2219	304	16	
24	206	250	85		128	131	81	65	
24	208	1250	500	250		550	139	76	

VALUE REPORT			
MATERIALS REQUISITIONED			
MONTH OF <u>July</u>			
NAME OF MATERIAL	CODE NO.	Value of Material Requisitioned LAST Month	Value of Material Requisitioned THIS Month
BARE COPPER WIRE NO 4	626	427580	436740
INSULATED COPPER WIRE NO 4	627	79045	86379
BARE COPPER WIRE NO 6	636	649811	753078

EXPENSE MATERIAL DISTRIBUTION							
PLANT NO. <u>4</u>				PERIOD ENDING <u>June 30</u> 19 <u>3</u>			
DEPT	ACCOUNT	BUDGET AMOUNT	ACTUAL AMOUNT	VARIANCE		DEPARTMENTAL TOTAL ACTUAL	
				OVER	UNDER		
10	120	405050	384725		20325		
10	121	121000	121530	530			
10	123	214060	210363		3697		
10	126	95000	95000				
10	134	3500	5120	1620			
							816738
12	120	45000	45526	526			
12	123	32000	32000				
12	124	125000	105147		19853		

DISTRIBUTION OF PRODUCTIVE MATERIAL							
DATE <u>May 31</u>							
Order Number	MATERIAL		Actual Amount	Standard Amount	VARIANCE		
	Number	Name			Over	Under	
3120	832	BRASS PLATE	41650	40000	1650		
3120	1044	BRASS TUBING	1946	2000			54
3120	1120	6X9 INSULATING PANEL	1071	1250			179
3120	1141	COILS	2247	3000			753
			46914*	46250*			
8450	402	RHEOSTAT	65000	65000			
8450	730	BOLTS AND NUTS	21000	21000			
8450	955	SP. DT SWITCH	5000	6000			1000

3100350806000000

13  
13  
13  
13  
13  
13  
13

### Payroll and Labor Accounting

Accurate production costs are essential for proper control of manufacturing. Payroll and labor distribution records must, therefore, meet the requirements of cost accounting as well as those of general accounting. The allocation of labor costs to the particular cost unit—order, part and operation, process—involves more detailed information than is required for general accounting. The two records must agree. If standard costs are used, the variance is often computed for each unit as well as carried in total for the general ledger. The Electric Accounting Method fulfills these requirements with speed, accuracy, and economy, and accommodates itself readily to any of the accepted cost accounting systems.

atically under the Electric Accounting Method.

If the time cards are job tickets, these are listed daily, controlling on employee number, to prepare a labor summary. Simultaneously, a summary card is punched for each employee, showing total hours and amount. These are used to tabulate the payroll. The direct job tickets are placed in the work-in-process file by cost unit; the indirect tickets are filed by account number.

If the time cards are daily time reports, these contain the total hours and amount in punched form. One distribution card is punched for every job on the time report, showing complete

MAN NO. <b>16-53</b>		ORDER OR ACCT. <b>9625</b>		<b>JOB TICKET</b>																																																																																																																					
MAN NAME <b>J. K. Dale</b>				DATE	MAN	ORDER	PART	DEPT.	MACH.	PIECES	HRS.	RATE	AMT.																																																																																																												
				NO.	NO.	OR	NO.	CHG.	NO.	NO.	X	=																																																																																																													
				DAY	DEPT.	ACCOUNT	NO.	NO.	NO.	NO.																																																																																																															
DESCRIPTION OF WORK																																																																																																																									
<table border="1" style="width: 100%;"> <tr> <td>DATE</td> <td>CLOCK NO. <b>21-423</b></td> <td>EMPLOYEE NAME <b>Henry A. Bronson</b></td> <td colspan="13"></td> </tr> <tr> <td></td> <td>ELAPSED TIME</td> <td>RATE</td> <td>EXTENSION</td> <td>QUANTITY</td> <td>CUSTOMER</td> <td>PART NUMBER</td> <td>MFG. ORDER NO.</td> <td>OPERATION NAME</td> <td colspan="2">OVERTIME</td> <td colspan="2">STOP</td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>IN</td> <td>OUT</td> <td>IN</td> <td>OUT</td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td></td> <td><b>9 4.0</b></td> <td><b>2.5</b></td> <td><b>.48</b></td> <td><b>1.20</b></td> <td><b>140</b></td> <td><b>425</b></td> <td><b>8-215</b></td> <td><b>4123</b></td> <td><b>4</b></td> <td><b>Cutting</b></td> <td></td> <td></td> <td colspan="2"><b>006 403</b></td> </tr> </table>																DATE	CLOCK NO. <b>21-423</b>	EMPLOYEE NAME <b>Henry A. Bronson</b>															ELAPSED TIME	RATE	EXTENSION	QUANTITY	CUSTOMER	PART NUMBER	MFG. ORDER NO.	OPERATION NAME	OVERTIME		STOP													IN	OUT	IN	OUT																																																	<b>9 4.0</b>	<b>2.5</b>	<b>.48</b>	<b>1.20</b>	<b>140</b>	<b>425</b>	<b>8-215</b>	<b>4123</b>	<b>4</b>	<b>Cutting</b>			<b>006 403</b>	
DATE	CLOCK NO. <b>21-423</b>	EMPLOYEE NAME <b>Henry A. Bronson</b>																																																																																																																							
	ELAPSED TIME	RATE	EXTENSION	QUANTITY	CUSTOMER	PART NUMBER	MFG. ORDER NO.	OPERATION NAME	OVERTIME		STOP																																																																																																														
									IN	OUT	IN	OUT																																																																																																													
	<b>9 4.0</b>	<b>2.5</b>	<b>.48</b>	<b>1.20</b>	<b>140</b>	<b>425</b>	<b>8-215</b>	<b>4123</b>	<b>4</b>	<b>Cutting</b>			<b>006 403</b>																																																																																																												

The employee's time card is usually a dual tabulating card—that is, both written and punched. This card may be either a job ticket, covering a single job; or a daily time report, recording all jobs worked upon during the day. It shows the date, identification of the job and the employee, starting and stopping time, rate, elapsed time, and amount earned.

After being filled out by the employee, the time card contains in written form the identification information, starting and stopping clock registrations, and pieces produced. At the end of the day the elapsed time is computed from the clock registrations and checked with that shown on the attendance record. The cards are rated, extended, and punched. The computing and punching of extensions are performed auto-

atically. The time report cards are used to tabulate the payroll; the direct distribution cards are placed in the work-in-process file, and the indirect cards in the expense labor distribution file.

Cards are punched for each payroll deduction—such as insurance, savings, purchases, advances—and are filed to be included in the payroll tabulations. A permanent file of master cards is also maintained, which show employee's name, department, and clock number. At the end of each payroll period, the master, payroll, and deductions cards are machine-sorted together by department and employee number, and tabulated on the payroll sheet (shown on the following page). Deductions are made automatically, and names as well as numbers may be printed.

During the printing of the payroll, summary cards may be punched automatically showing the earnings for each employee; these cards may also serve as the payroll checks themselves. The summary cards may be tabulated for current wage statistics and, at the end of the year, for income tax reports. The check application is described more fully on a later page.

particular direct and indirect labor accounts affected.

If an order cost system is in effect, orders are closed and costed immediately upon their completion. Direct labor cards are tabulated (with materials cards) to secure the direct cost. Burden rates are then applied to obtain total costs.

At the end of the accounting period, the cards which have accumulated in the distribution file are tabulated to obtain the distribution of direct and indirect labor costs from which journals are prepared charging and crediting the

Supplementary reports also, such as payroll analyses, efficiency reports, wage incentive reports, and wage studies of various types, may be prepared from the payroll and distribution cards.

PAYROLL									
PERIOD ENDING July 31 193									
NAME	CLOCK NO.	CLOCK NO.	HOURS	GROSS PAY		DEDUCTIONS		NET PAY	
Paul Goldsmith	130	130	4 00	2 400		25		2 375	
Marvin London	132	132	4 32	2 658		25		2 633	
William Mero	133	133	5 05	3 030		5 25		2 505	
								2 855	
								2 670	
								2 225	
								1 210	
								2 100	
								2 080	

STANDARD—ACTUAL LABOR COST						
PLANT 17			PROGRESS OF OPEN ORDERS TO Oct 1			
ORDER No.	PIECES ORDERED	PIECES DELIVERED	ACTUAL AMOUNT		STANDARD AMOUNT	ABOVE STANDARD
11 475	100	75	5 450		4 875	575
11 486	150	97	1 777 2		1 937 6	
11 494	20	18	906		270	636

DIRECT LABOR DISTRIBUTION AND UNIT PARTS COST							
PERIOD ENDING July 31 193							
PART	OPERATION	PIECES	HOURS	AMOUNT	AVERAGE UNIT COST	AVERAGE UNIT TIME	
3842	6062	4200	2189	9280			
3842	6063	4200	1436	8575			

PAYROLL REGISTER									
PERIOD ENDING July 9 193 5									
PLANT Clearwater									
NAME	CLOCK NO.	HOURS	GROSS EARNINGS	DEDUCTIONS				NET PAY	
				INSURANCE	SAVINGS	TOOLS	MISC.		
THOMAS REDWOOD	110	480	6850	110	500		60	6180	
JOSEPH IRVINGTON	115	480	4475	140	50	90		4195	
FREDERICK MARTIN	116	440	5000	100			350	4550	
NORMAN MOREHOUSE	120	525	7650	220	400	135	37	6858	
ALFRED WESSELDORF	124	600	4500		100			4400	
RALPH MILLINGTON	125	480	4250	180		75		3995	
HARLAND DONALDSON	130	480	5400	110	200		185	4905	
WILLIAM BRANTINGTON	139	420	3625	160	125			3340	
RONALD GREENLIEF	140	120	1800	110			266	1424	
MALCOLM SPRECKER	141	480	4250	180		75		3995	

### Accounts Payable

The nature of the particular accounts-payable system of an organization exercises important effects, both internal and external. It should provide prompt payment of creditors, the securing of all profitable discounts, and an accurate statement of the total liabilities of the business. Expense distribution, compiled from the same sources, must be completed early for the monthly closing. These records involve a large amount of detail with a peak load at the end of the month if the method is one of individual posting and balancing. Under the Electric Accounting Method no posting is required, with the exception of transcribing the source data into punched-hole form. Balances are obtained automatically by the action of the machine. Month-end peak loads are eliminated.

separate sheet for each vendor. Credit amounts, punched in credit cards, are deducted automatically by the machine, and the net total is printed on the remittance statement. A check is drawn for the net amount and mailed with the remittance statement to the creditor.

The remittance statement may be a separate form distinct from the check; or it may be combined with the check, separable from it by a line of perforations. The check itself may be a tabulating card. The advantages of such a check are described on a later page.

At the time of punching an accounts-payable card from each invoice, a second type of card is punched, one card for each distribution ac-

ACCOUNTS PAYABLE																					
INVOICE DATE			VENDOR'S INVOICE NO.	APRON NO.	VENDOR NO.	DEPT.	DUE DATE		TERMS	GROSS AMOUNT	DISCOUNT	NET AMOUNT	TRANSPOR-TATION	TOTAL COST	TOTAL RETAIL	% MARK UP	POSTED		PAID	TRANS.	
MO.	DAY	YR.					MO.	DAY									MO.	DAY			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09

LICENSED FOR USE UNDER PATENT 1,772,492

A tabulating card is punched from each invoice. The cards are first listed by invoice number to prepare the invoice register. A tabulation is then made by due dates, the totals are posted to a control, and the cards are placed in an unpaid file by due date. A few days before each due date the cards for the day in question are removed and tabulated for a total which is checked to the control. The tabulated commitment statement is forwarded to the treasurer as advance notification of cash requirements on each due date.

The cards for invoices due are sorted by vendor, placed in the Electric Accounting Machine, and listed on remittance statements, a

count appearing on the invoice. The two sets of cards are tabulated together for a balance. This automatic check, established at the outset, with the subsequent balancing of all reports to a control, eliminates manual checking and guarantees the agreement of account distribution with actual liabilities incurred during the month.

The distribution cards are filed until the end of the month when they are electrically sorted and tabulated by account number to prepare the account distribution statements.

Purchase distribution reports also may be tabulated, showing purchases analyzed by ac-



count numbers, commodities, and vendors. Any special or subsidiary reports are easily prepared by selecting and resorting the proper cards.

voices. Therefore, with a small increase in card punching, the balance of general ledger entries, originating outside of invoices, may also be recorded in punched card form, with the result that the general ledger itself, in addition to the preliminary records, is automatically prepared.

Most general ledger charges consist of in-

DISTRIBUTION BY ACCOUNTS							
MONTH OF <u>July</u> 19 <u>3</u>							
ACCOUNT	SUB ACCOUNT	DEBIT AMOUNT	CREDIT AMOUNT	ACCOUNT TOTAL			
				DEBIT		CREDIT	
1 106	01	2527					
1 106	05		4800				
1 106	06	2000					
1 106	15	795				522	
1 107	01		2150				
1 107	02	4585					
1 107	04	2580					
						5015	

GENERAL LEDGER						
ACCOUNT No. 261				NAME Maintenance		
MONTH	ACCOUNT NUMBER	VOUCHER NUMBER	KIND	AMOUNT DEBIT	AMOUNT CREDIT	BALANCE
12	261	1201	3	562842		
12	261	1250	1	84162		
12	261	1254	1	50067		
12	261	1258	2		7438	
12	261	1265	1	34727		

INVOICE REGISTER							
ENTRY DATE <u>January 26</u>							
INVOICE NO.	VENDOR	VENDOR NO.	INVOICE DATE	GROSS	DISCOUNT	NET	
1001	A J HENDERSON AND SONS	1261	1 15	17500	1750	15750	
1002	MARSHALL AND SMITH CO	1329	1 16	25700	2570	23130	
1003	SMITH THOMAS AND CO	1534	1 10	19325	1932	17393	
1004	HARRY WORTH SONS	1712	1 11	1050	105	945	
1005	HAHNE JACKSON AND KURZ CO	1250	1 15	21950	2195	19755	
1006	U S MAN CO	1321	1 15	15200	1520	13680	
1007	HERMAN AILES AND CO	1025	12 15	17600	850	16750	
1008	WHITMAN SMITH AND CO	1542	1 16	10000	750	9250	
1009	CHARLES T GOOD CO	1202	1 19	5000	500	4500	
1010	JAMES GORDON AND DAVIS CO	1276	1 13	7500	750	6750	

### Electric Accounting Checks

Electric accounting checks serve a double purpose—they are used both as checks and as tabulating cards. As checks they contain in written form all the elements legally necessary to establish them as authentic media of payment—preprinted name of bank and check number; the date, payee, amount, and authorizing signature. As tabulating cards they are used to prepare, by the Electric Accounting Method, the various records connected with check payment. The presence of the information in both written and punched form is an added protection to the check. The use of the cards to prepare accounting and statistical reports insures speed and accuracy in the preparation of these records.

The punched date and amount are printed automatically on the check, the amount preceded by asterisks for protection. Any explanatory data which are desired may also be printed on the check—for example, gross amount, deductions, discount.

The punched and printed checks are balanced to controls and machine-listed by check number to prepare the check register. They are then signed and mailed. When the canceled checks are returned by the bank they (or their duplicates) are tabulated for totals and balanced with the bank charges.

The cards are next used to obtain the bank

CHECK NUMBER <b>13261</b>	<b>REPRESENTATIVE COMPANY</b> <small>NEW YORK NEW YORK</small>	DATE <b>JUL 11 193</b>									
PAY	* * * * <b>65</b> DOLLARS <b>34</b> CENTS	IBM 12345 0 1 2 3 4 5 6 7 8									
TO THE ORDER OF	<b>Robert D Morrison</b>	PAYROLL ACCOUNT <i>John J Jackson</i> <i>A. Sorenson</i>									
TO	<b>STANDARD NATIONAL BANK</b> 19-749 OF THE CITY OF NEW YORK 1-NY	<table border="1"> <thead> <tr> <th>CHECK NUMBER</th> <th>MAN NUMBER</th> <th>AMOUNT</th> </tr> </thead> <tbody> <tr> <td>999999</td> <td>999999</td> <td>999999</td> </tr> <tr> <td>164</td> <td>170</td> <td>175</td> </tr> </tbody> </table>	CHECK NUMBER	MAN NUMBER	AMOUNT	999999	999999	999999	164	170	175
CHECK NUMBER	MAN NUMBER	AMOUNT									
999999	999999	999999									
164	170	175									

The preprinted check number is prepunched in the card if desired. If the source records from which the check is prepared are tabulated records, the check is punched automatically during the process of tabulating. In this way it becomes a by-product, secured at a minimum cost in time and money.

A single check card may serve all purposes—for payment and for the preparation of accounting and statistical records. A duplicate check may be used, in which case the duplicate is either punched simultaneously with the original or prepared automatically from it. The duplicate is used to prepare accounting and statistical records, and the original becomes the medium of payment.

reconciliation. If the single-check method is used the checks are listed by check number, with an automatic indication of missing numbers. This list is used to check off the returned checks on the original check register. The unchecked items represent the outstanding checks.

If the duplicate-check method is used the returned checks are combined with all the duplicates in the file, sorted to check number and listed. The actuation of the Electric Accounting Machine causes the amounts from the original and duplicate cards to be printed on a single line, in offset columns, with a total for each column. The difference between these totals

is the amount of checks outstanding. The identity of the individual outstanding checks is apparent at a glance, from the absence of an amount in the column containing the amounts of original checks.

The duplicate check cards (or the originals, under the single-check method) are finally tabulated to prepare any desired analyses of dis-

bursements—for example, by account, payee, class of payee, bank.

Electric accounting checks are particularly advantageous in connection with accounts-payable, payroll, and dividend-disbursement systems, due to the number of allied records which can be prepared from them. Their use is not confined to these records, however, but is effective for any straight check procedure.

PAYROLL AND PAY CHECK REGISTER											
DEPT. <u>16</u>			PERIOD ENDING <u>March 15</u>								
NAME	CLOCK NO.	CLOCK NO.	GROSS PAY		DEDUCTIONS		NET PAY		CHECK AMOUNT	CLOCK NO.	CHECK NO.
Haslett, T.	1301	1301	2340		178		2162		2162	1301	26731
Warwick, H. T.	1302	1302	2486		220		2266		2266	1302	26732
Reeves, P.	1303	1303	2630		100		2530		2530	1303	26735
Sanderson, E.	1304	1304	2245		50		2195		2195	1304	26734
Smith, W.	1305	1305	2350		140		2210		2210	1305	26735

BANK RECONCILIATION							
DATE _____ 193__							
CHECK No.	DATE	DUPLICATES		ORIGINALS			
1251	6 21	19	78	19	78		
1252	6 21	21	89				
1253	6 21	29	35			29	35
1254	6 21	35	00			35	00
1255	6 21	21	63				
1288	6 21	26	78			26	78
1289	6 21	43	00			43	00
1290	6 21	32	86				
1291	6 21	16	42			16	42
		97	0145 *			81	3952 *
		81	3952				
	Checks Outstanding	15	6193				

### Finished Stock Control

The chief problem in securing an effectual control of finished stock is that of coordinating the contributing data. These include continuous records of all activities which affect the status of finished stock, either directly or indirectly. All these facts should be assembled into a single report, in detail by stock number or item classification. The report should be available as frequently as is useful to the management, and when completed should be up-to-date. These requirements have been difficult to meet, which accounts for the fact that scientific control of finished stock has rarely been achieved to its fullest extent. Recent developments in the Elec-

placed in the stock file by item identification number.

In addition to the individual transaction cards, the stock file contains balance cards showing the balance forward in each of the "status" fields.

The cards in the current file are tabulated at predetermined intervals to prepare the "position" report, so called because it shows the complete position regarding finished stock, both actual and developing.

The alignment of the punching of quantities causes all transaction cards to be registered

NEMA CODE		STANDARD COST NO.	TOTAL STANDARD COST	CLASS OF GOODS	FACTORY PRODUCTION ORDER NO.	MIN	INVA	INVENTORY	MIN	INVA	INVENTORY	CUSTOMER ORDER NUMBER	DATE	SHIPMENTS	UNSHIPPED ORDERS	STOCK ON HAND	DUE FROM FACTORY
000	0000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
111	1111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
222	2222	222	222	222	222	222	222	222	222	222	222	222	222	222	222	222	222
333	3333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333
444	4444	444	444	444	444	444	444	444	444	444	444	444	444	444	444	444	444
555	5555	555	555	555	555	555	555	555	555	555	555	555	555	555	555	555	555
666	6666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666
777	7777	777	777	777	777	777	777	777	777	777	777	777	777	777	777	777	777
888	8888	888	888	888	888	888	888	888	888	888	888	888	888	888	888	888	888
999	9999	999	999	999	999	999	999	999	999	999	999	999	999	999	999	999	999

tric Accounting Method make such control entirely practicable.

A tabulating card is punched for each single transaction originating from every source which affects the stock position—namely, customers' orders, production or purchase orders, production finished or purchases received, shipments, and all types of adjustments, such as transfers, canceled orders, waste, shrinkage, customers' returns. The card form is designed to contain complete identification of the item and the transaction, and also separate quantity fields for stock on hand, unfilled orders, due from factory or vendor, and sales. Each transaction is recorded in the proper quantity field, the other fields remaining unpunched. The cards are proved and balanced to controls daily, and

only in those counters of the machine whose quantities they properly affect. Deductions are performed automatically by the machine, and a net total is printed for each item. During the process of tabulation, a summary card is punched for each item, showing the new net balances. If desired, sales to date may be accumulated in the same manner and printed in a separate field on the report.

The frequency of reports is governed entirely by the requirements of the particular company. The method accommodates itself equally well to a daily, weekly, or monthly schedule.

The position report may include only active items, and may be prepared daily. Since normally only a portion of the entire line moves

daily, the report is brief and yet brings to the attention of the executive all items which potentially require action. Such daily reports may be supplemented quarterly by a tabulation showing the entire line. Tabulations also may be made of the inactive items.

With each punching of balance cards, the detail cards are released from the current file. From them numerous valuable subsidiary reports may be prepared in connection with production costs, sales analysis, accounts receivable, branch inventories, and special studies.

DAILY SUMMARY OF ORDERS, PRODUCTION, AND SHIPMENTS								
DAILY INVENTORY OF UNFILLED ORDERS AND STOCK AVAILABLE								
DATE <u>June 30</u>								
GRADE			CLASS SIZE	ORDERS RECEIVED	PRODUCTION	SHIPMENTS	PRESENT POSITION	
Type	Mdse.	Tread					ORDERS	STOCK
1	1101	01	30350	2500	800	3500	9000	5300
1	1104	01	32400	3000		2000	11500	4000
1	1106	01	30300		125	600	3000	4525

STOCK REPORT					
WEEK ENDING <u>July 7</u> 193					
CATALOG NO	SALES		UNFILLED ORDERS	STOCK ON HAND	DUE FROM FACTORY
	YEAR TO DATE	MONTH TO DATE			
93	4950			21855	
103	1750	1500		4160	20
104	56600	6250	11880	210106	
105	6500	500	1000	27565	

STOCK RECORDS							
DATE <u>June 30</u> 193							
CLASS	STOCK NO	COMMODITY	RECEIPTS	DISBURSEMENTS	BALANCE ON HAND	PRODUCTION OR PURCHASE ORDER	ASSIGNMENTS
61	109	NO 7 WOOD SCREWS	161299	66900	99300	200000	5200
61	101	NO 8 WOOD SCREWS			32000		
61	206	NO 4 MACH SCREWS	113120	113120			
61	303	SPEC BRASS SCREWS	108945		108945	100000	100000

### Physical Inventory

The chief purpose of a physical inventory is to evaluate stock on hand in order to adjust this asset in the general ledger and in the detail stock records. A second purpose, scarcely less important, is to analyze stock into various significant classifications. The profitable disposition of present stock and the planning of future activity are greatly simplified by the use of such analyses. The usual results are a reduced inventory investment and an increased stock turnover. By the Electric Accounting Method the inventory-taking is accomplished in a minimum length of time—an important point, since most organizations find it necessary to suspend production operations during this period. The accounting information is available shortly after the inventory has been taken—often the following day. Various statistical reports, which under a manual method would require so much time as to be prohibitive, are completed in a few days.

The cards are issued to the inventory-takers by serial number, and each one must be accounted for when the listing is completed and the cards have been turned in to the accounting department.

The quantity of each item in stock is counted and written on the proper card, each count usually being checked by a second counter. The cards are finally detached from their stubs and the stub is affixed to the article or bin as a visual indication that the item has been inventoried. The serial number on the stub serves to identify the latter with its tabulating card in the event that a re-count of particular items is desired.

The tabulating cards are sorted by serial number and machine-listed to detect any missing cards. After all cards have been accounted for it remains only for the quantity, or quantity and extension, to be punched.

R 1076  
**NO. 1491**

PART NO.  
*210757-A*

**TAKEN**

PATENTED UNDER U.S. PATENT 1,717,482

**INVENTORY TAG**  
**DO NOT FOLD TEAR OR DESTROY**

PLANT <b>8</b>	DEPT <b>12</b>	CLASS <b>3</b>	WEIGHT	TAG NO 0000	PLANT 0000	DEPT 0000	CLASS 0000	NUMBER 0000	SUF 00	QUANTITY 0000	MATERIAL 0000	UNIT PRICE 0000	MATERIAL 0000	AMOUNT 0000
PART NO. <b>210757-A</b> SIZE <b>BG-1XA</b>				DESCRIPTION <i>Spark Plug</i>										
QUANTITY <b>1200</b> PRICE <b>40</b> AMOUNT <b>480.00</b>				TAC NO 1111 1111 1111 1111 1111 1111 1111 1111 1111 1111 1111 1111 1111 1111 1111										
HAND COUNT <input type="checkbox"/> SCALE COUNT <input checked="" type="checkbox"/>				SECTION <b>16</b> BIN NO <b>71</b> BLDG. NO <b>5</b> FLOOR NO <b>2</b>										
COUNTED BY <i>M. Moer.</i> ENTERED BY <i>S. Smith.</i>				PRICED BY <i>Wessel</i> STUB CHECKED BY <i>C.B.</i>										
<b>ALL TAGS MUST BE ACCOUNTED FOR</b>														

LICENSED FOR USE UNDER PATENT 1,717,482

A dual stub tabulating card is used to record the inventory count, one card for each item of stock. The cards are serially numbered on the card itself and on the detachable stub. The serial number is prepunched at the card factory. The card form provides for information, in both written and punched form, covering a description of the item in all detail, its quantity, unit price, and total price.

The identifying information and unit price are written and punched previous to the inventory-taking in order to reduce the time required later for listing the inventory and punching the cards.

By means of the punched card procedure known as "progressive digitizing" the extension of individual items may be omitted altogether if only total values by departments are required. From the punched quantity and unit price the Electric Accounting Machine accumulates the total values. Through the use of the digitizing method total values for labor and material, cost and market, or other combinations of costing and pricing may be secured simultaneously.

If extensions are required for each card, these are computed and punched automatically from the quantity and unit price already punched in the cards.

The cards are tabulated to obtain the required accounting totals, either by departments or in total. Following this a listing is made by stock number, which serves as a support for the accounting totals and as a cross reference with the previous listing by tag number.

Any special inventory analyses which are desired may be provided for by including the proper punching when the cards are originally prepared, and are easily obtained by electric sorting and tabulating after the accounting work has been completed.

INVENTORY REPORT (EXTENDED CARDS)				
PLANT <u>Pittsburgh</u>			DATE <u>Dec. 31</u> 193 <u>   </u>	
PART NO.	DESCRIPTION	UNIT	QUANTITY	AMOUNT
40304	CABLE IGN WIRE BRAIDED LARGE	FT	110	3300
40305	CABLE IGN WIRE BRAIDED SMALL	FT	173	3460
40306	STANDARD IGNITION WIRE	FT	200	1600
40317	WIRE MANIFOLD CLAMP TUBE	EA	60	4800
40318	SPARK PLUG GROUND ASSEMBLY	EA	31	4650

INVENTORY DETAIL (EXTENDED CARDS)								
PLANT <u>New York</u>						DATE <u>September</u> 193 <u>   </u>		
DEPT. LOCATION	TAG NUMBER	MATERIAL CLASS	PART NUMBER	LAST OPERATION	QUANTITY	UNIT COST	AMOUNT	
40	16	2047	22	12500	136	450	1125	50625
40	16	2139	22	12501	210	200	750	15000
40	16	1648	22	12502	125	190	1050	19950
40	16	2102	22	12503	193	350	1050	36750
40	16	1862	22	12504	168	210	975	20475

INVENTORY DETAIL (DIGITING CARDS)									
PLANT <u>Pittsburgh</u>						DATE <u>December</u> 193 <u>   </u>			
DEPT. OR LOCATION	TAG NO.	PART NO.	LAST OPER.	QUANTITY	UNIT LABOR COST	UNIT MATERIAL COST			
24	6548	15680	205	125	143				650
24	6549	15682	208	50	1853				300
24	6550	15686	209	60	1236			3	210
24	6551	15687	209	200	760				204
24	6552	15690	211	1500	400			1	365
24	6553	15693	211	5	4297			2	053
24	6554	15695	214	50	1143				250
24	6555	15696	215	25	1266				735
24	6557	15697	215	200	625				3204
24	6558	15700	218	1200	400			1	032
24	6559	15706	222	50	341				209
24	6561	15707	222	100	329				214
24	6562	15709	222	1670	1005				864
24	6566	15712	224	543	882				675
24	6567	15713	224	1000	435				411
24	6569	15715	225	657	211				198
24	6570	15717	226	1400	438				335
24	6572	15719	230	527	788				677
24	6580	15800	231	1200	1000				890

### Sales Accounting

Selling and the cost of selling are matters of serious concern to present-day business. Both of these problems are subject to scientific control similar to that which has been so successfully applied to production. The first essential for such control is the possession of detailed information covering all the facts which pertain to sales activity. The specific factors to be included among the sales analyses for a particular company depend upon the type of business. In general these factors include the product itself in all pertinent classifications, the extent and character of demand, and the channels through which the product is brought to its market.

anced to a control and filed until required, at which time they are sorted and tabulated to prepare the various analyses desired. Since all reports are run from a single set of cards, their totals are certain to be in agreement, and accuracy is assured. Accumulative reports are prepared with no extra effort by the use of the periodic summary cards, automatically punched.

The sales analysis card may be used also to provide essential information for the general ledger. Accounts such as sales, returns, cost of goods sold, and other real and nominal accounts

12 DATE		INVOICE NUMBER	SOURCE	TERMS	CUSTOMER NUMBER	CLASS OF TRADE	CITY	STATE	SALESMAN NUMBER	STEP OR PLAN ARRANGEMENT	ARTICLE NUMBER		SALES			RETURNS															
MO	DAY										QUANTITY	SALES AMOUNT	COST AMOUNT	QUANTITY	SALES AMOUNT	COST AMOUNT															
10	0	00000	0	0	0000	00	00	00	00	00	00	00	00	00	00	00	00	00	00												
1	1	11111	1	1	1111	11	11	11	11	11	11	11	11	11	11	11	11	11	11												
CODED AUTOMATICALLY BY												2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
CUSTOMER'S MASTER CODE CARD												3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	44444	4	4	4444	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44											
5	5	55555	5	5	5555	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55											
6	6	66666	6	6	6666	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66											
7	7	77777	7	7	7777	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77											
8	8	88888	8	8	8888	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88											
9	9	99999	9	9	9999	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99											

LICENSED FOR USE UNDER PATENT 1,772,492

Formerly the securing of such sales analyses was not practical because the amounts of time and money required were prohibitive. With Electric Bookkeeping and Accounting Machines, however, this is one of the most appropriate and profitable applications since the value of the machines increases with the amount of detail to be classified and compiled.

A tabulating card is punched for each item or classification on the customer's invoice, showing, for example, customer number, salesman, district or territory, trade class, complete item identification, and amount. The cards are bal-

anced to a control and filed until required, at which time they are sorted and tabulated to prepare the various analyses desired. Salesmen's commission statements, royalty statements, and tax statements also may be prepared from the sales analysis cards.

The repeated use of a single card for many purposes is one of the conspicuous advantages exclusive to the punched-hole method. All individual postings are eliminated. The tabulating card once punched and proved is permanent and unalterable. Consequently, the danger of the transposition, omission, or duplication of figures is entirely removed.



The variety of analyses which can be prepared for the use of management is practically unlimited. The answers may be readily found for such basic questions as—"What was sold?", "Who sold it?", "Where was it sold?", "Who bought it?", "What was the profit?" Other valuable facts concerning distribution such as the relative profitableness of products, salesmen, branches, channels of distribution, classes of industry, and advertising media may be intermittently prepared. These valuable analyses

are compiled by the International Electric Book-keeping and Accounting Machine Method with practically no additional cost and no disruption of the regular accounting routine.

A few representative reports appear below which show some of the typical analyses of sales which may be prepared. Many others may be designed to incorporate the essential figure-facts required for each specialized type of business.

STATEMENT OF SALES AND EXPENSES BY SALESMEN																																
MONTH OF <u>July</u> 193 <u>  </u>																																
BRANCH	SALESMAN	THIS MONTH		YEAR TO DATE																												
		SALES	EXPENSE	SALES	EXPENSE																											
21	220	3 025 00	6 42 00	1 782 100	3 021 00																											
21		<table border="1"> <thead> <tr> <th colspan="6">COST OF SALES</th> </tr> <tr> <th colspan="6">MONTH OF <u>July</u> 193<u>  </u></th> </tr> <tr> <th colspan="2">PRODUCT</th> <th rowspan="2">QUANTITY</th> <th rowspan="2">SALES AMOUNT</th> <th rowspan="2">COST AMOUNT</th> <th rowspan="2">GROSS PROFIT AMOUNT</th> </tr> <tr> <th>CLASS</th> <th>NUMBER</th> </tr> </thead> <tbody> <tr> <td>21</td> <td>10 601</td> <td>178</td> <td>3 56 00</td> <td>2 13 60</td> <td>1 42 40</td> </tr> </tbody> </table>					COST OF SALES						MONTH OF <u>July</u> 193 <u>  </u>						PRODUCT		QUANTITY	SALES AMOUNT	COST AMOUNT	GROSS PROFIT AMOUNT	CLASS	NUMBER	21	10 601	178	3 56 00	2 13 60	1 42 40
COST OF SALES																																
MONTH OF <u>July</u> 193 <u>  </u>																																
PRODUCT							QUANTITY	SALES AMOUNT	COST AMOUNT	GROSS PROFIT AMOUNT																						
CLASS	NUMBER																															
21	10 601	178	3 56 00	2 13 60	1 42 40																											
21																																
21																																
21																																

SALES AND EXPENSES BY CLASS OF CUSTOMER						
MONTH OF <u>July</u> 193 <u>  </u>						
CLASS OF CUSTOMER	NUMBER	THIS MONTH		YEAR TO DATE		
		SALES	EXPENSE	SALES	EXPENSE	
Automotive	1 1	6 435 00	4 85 00	3 168 000	6 185 00	
Electrical						7 22 400
Hardware						3 86 300
Radio						7 40 00
Miscellaneous						2 17 800

COMMISSION STATEMENT						
NAME <u>Anderson</u> MONTH OF <u>July</u> 193 <u>  </u>						
BRANCH	SALESMAN	INVOICE NUMBER	SALES	RETURNS		
32	315	4236	12500			
32	315	4438	34085			
32	315	9042			2765	

### Accounts Receivable

Accounts Receivable is one of the most important accounts to be found in the books of any industrial or commercial organization. It is upon accounts receivable that an organization principally depends for the income with which to meet maturing obligations and to continue operations. The Electric Accounting Method provides the necessary means for performing economically the detail work involved in the accounts-receivable procedure. It reduces errors, insures the prompt rendering of statements and places no limitations upon the selection of the particular type of statement which is best adapted to the needs of the individual business.

The debit cards are balanced to a control and placed in the current accounts-receivable file by account number, behind their corresponding index tab cards.

There are several methods of applying payments. The choice of a particular method necessarily depends upon the requirements of the individual business.

From the remittance slip, the cash received is recorded in a tabulating card, either in the corresponding debit card itself or in a separate credit card. The paid debit cards may be re-

SALES		CUSTOMER		STATE	CREDIT	DATE			INVOICE OR	DEBIT AMOUNT	CREDIT	PAID	ACCOUNTS RECEIVABLE				
MAN	NUMBER	CD.	NO.	CD.	LIMIT	MO.	DAY	YR.	REFERENCE	NO.	AMOUNT	NO.	DAY	YR.	MO.	DAY	YR.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

A master duplicating card and an index tab card are first set up for each account, showing customer number, name, and address, and any credit information desired, in both written and punched form.

A debit card is punched from each invoice. The common information from those invoices which apply to a single customer is duplicated (that is, punched automatically) in the debit cards by means of the master duplicating card. The rapidity of duplication adds considerably to the speed of punching.

The accounts-receivable debit card may be a summary card punched automatically from a tabulation of the sales-analysis detail cards.

moved daily from the current file. In this event, the accounts-receivable file contains only the open items, and continues to contain such items until they are cancelled by payment.

At the end of the month the open file is first tabulated by account number for the trial balance and then listed upon the customers' statements. The original statements are mailed to customers and the duplicates retained for reference.

The open file may be started anew each month by punching a balance-forward card for each month's balance. Current debit and credit cards are then punched and placed in the open file.

No cards are withdrawn during the month. Each month's statement is complete in itself, showing the old balance, every debit and credit item of the current month, and a new balance.

Under some conditions the tabulating card may serve as the invoice itself. In this case the card contains its information in both written and punched form. After the cards have been used to tabulate the statements, those applying to each statement are attached thereto, as a support, and sent to the customer.

Following the mailing of statements, an aged trial balance is tabulated, showing the amounts owing for the current month and for periods

over 30, 60, and 90 days.

The cards, both debit and credit, for the month just ended are next tabulated to prepare a history of customer's account, a separate sheet for each customer.

If a separate credit card is employed, the cash book and deposit slip may also be tabulated records, prepared simultaneously by means of an overlapping flyleaf form and carbon paper. This provides an automatic balance of accounts receivable with the general accounting records.

The accounts-receivable records may be combined with those for billing. The billing procedure is described on a following page.

DUPLICATE STATEMENT		JONAS & SMITH BRIDGEPORT, CONN.				CODE			
NAME <u>W. S. Allen</u>		ADDRESS <u>412 26th St.</u>		No. <u>13</u>		1 INVOICE			
New York, N.Y.						2 CASH RECEIPT			
						3 DEBIT MEMO			
						4 CREDIT MEMO			
						DATE <u>March 1</u> 193 <u>1</u>			
CREDIT LIMIT	CUSTOMER NUMBER	DATE			INVOICE OR REFERENCE NO.	CODE	DEBIT AMOUNT	CREDIT AMOUNT	BALANCE
		MONTH	DAY	YEAR					
2000	13								
	13	11	06	30	1273	1	20000		
	13	11	14	30	1084	4		6800	

DETAIL AGED TRIAL BALANCE										
MONTH OF July 193										
NAME OF CUSTOMER	PLANT DIV.	PLANT NO.	DATE MO. DAY	REFER. INVOICE NO.	KIND OF ENTRY	90 DAYS AND OLDER	60 DAYS	30 DAYS	CURRENT	BALANCE
Abendroth Box Co., 20 428 Pine St., Philadelphia, Pa.	10	51	408	333	10	2000	4250			
	10	51	420	671	10	1572				
	10	51	516	273	10		3654			
	10	51	608	334	10			3500		
	10	51	622	1034	10			4590		
	10	51	716	575	10				3690	
										112657*

CASH RECEIVED				DEPOSITED FOR ACCOUNT OF JONAS & SMITH			
				DATE February 16			
ACCOUNT NUMBER	DAY	CREDIT AMOUNT	DISCOUNT	BANK NO.	NET AMOUNT		
Acadap Pipe Co., 333 18th & Kings St., Cleveland, Ohio							
Acme Tool Co., 402 Bula Park, Detroit, Mich.	13	2 15	1086 60		307	1086	60
	96	2 15	706 50		307	635	85
	101	2 15	2315 00	7065	307	2315	00
	124	2 15	1178 90		307	1178	90
	187	2 15	836 10	8361	307	752	49
	203	2 15	1976 55		307	1976	55
	243	2 15	679 90		307	679	90
	266	2 15	1875 60		307	1875	60
	344	2 15	406 75		307	406	75
	378	2 15	1311 70	13117	307	1180	53
	423	2 15	401 80	4018	307	361	62
	436	2 15	1976 75	19768	307	1779	07
	466	2 15	2247 80		307	2247	80
	468	2 15	350 50	3505	307	315	45
	487	2 15	634 55		307	634	55
	505	2 15	856 00		307	856	00
	511	2 15	757 75		307	757	75

### Budgetary Control

The extensive adoption of budgetary control is one of the most important recent developments in management. Budgeting is a subject of keen interest among business leaders everywhere, either because they are operating under a budget or because they feel the need of doing so.

The successful budget requires that, first, estimated income and costs, and second, variance of actual from standard be broken down by item or classification, and that this variance be known promptly at the close of the period. These requirements formerly constituted the chief impediments in the operation of the budget, from the viewpoints both of clerical cost and of time. With the use of International Electric Bookkeeping and Accounting Machines, however, budgeting becomes a thoroughly practicable undertaking, and a valuable means of current control and of future planning.

tail cards and a tabulation is prepared showing actual amount, budget amount, and the amount over or under the budget. No manual computation is necessary, the subtraction for variances being accomplished automatically.

Accumulated amounts for the period to date—actual budget and variance—are also computed automatically. The total amounts for the first month of the period are punched in new cards by the Automatic Summary Punch at the time the budget report is tabulated. These total cards are included for tabulation with the succeeding month's budget and detail cards. In this way the accumulated amounts for the period to date are automatically carried forward each month.

In addition to preparing the periodic budget reports, the detail cards are used to make a

EXPENSE SUMMARY																														
DATE			CLASSIFICATION	EXPENSES YEAR TO DATE	EXPENSES FOR MONTH	BUDGET		BUDGET BALANCE + OR -	CLASS																					
MO.	DAY	YR.				MONTH	YEAR TO DATE																							
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

LICENSED FOR USE UNDER PATENT 1,772,482

Detail cards are punched daily for each item of sales, material, labor, and expense. These are first used in their respective current accounting procedures. After they have served this purpose they are sorted and tabulated by budget classification.

Budget cards are punched monthly, showing department, item or classification, and the budget amount. These are combined with the de-

variety of analyses upon which the forecasts for a new budget period are based. Such information as sales by territory, salesman, trade class, customer, and other data suitable for making exhaustive sales and market analyses is available from the sales detail cards. Similarly the production, material, labor, and expense cards contain any information which is pertinent to a thorough analysis of these records.

With the last day's detail cards, all punching for the month is complete, and the budget report is ready to be tabulated, the total or balance-forward cards and the budget cards being already available. The printed reports as they

issue from the machine are complete in detail, accurate against controls, and ready for the attention of executives while their contents are still news of the current status and when effective remedial measures may be taken.

SALES AND EXPENSE BUDGET REPORT										
MONTH OF <u>May</u> 193 <u>3</u>										
DEPT.	ACTUAL SALES			SALES BUDGET			SALES EXPENSE			
							ACTUAL AMOUNT		OVER BUDGET	
1	94007	50		90000	00		91234	7	62347	
2	66431	10		70000	00		72104	1		78999
3	84721	40		84000	00		87643	1	126431	
4	20432	00		25000	00		32841	0		75849
5	93215	00		90000	00		97605	0		7500
6	10946	25		15000	00		15431	2		12052

BRANCH MONTHLY EXPENSE STATEMENT											
BRANCH <u>Philadelphia</u> MONTH OF <u>May</u> 193 <u>3</u>											
	Account Number	BRANCH	CURRENT MONTH				YEAR TO DATE				
			Budget	Expense	% of Net Sales	Variance	Budget	Expense	% of Net Sales	Variance	
<b>DIRECT EXPENSE</b>											
Advertising	301	301	4	563	414		149-	67561	13585		6829
Commissions	303	303	4	30	796		766	360	1118		758
Management Salaries	305	305	4	450	450			5400	5400		
Management Traveling	307	307	4	250	331		81	3000	4136		1136
Salesmen's Salaries	309	309	4	1800	1561		239-	21600	23853		2253
Salesmen's Traveling	311	311	4								
<b>TOTAL DIRECT</b>	312	312	4	3093	3552		459	37116	48092		10976
<b>INDIRECT EXPENSE</b>											
Auto Expense	314	314	4								
	315	315	4	125	125			1500	1525		25

MANUFACTURING BUDGET REPORT									
MONTH OF <u>March</u> 193 <u>3</u>									
DEPARTMENT	ACCOUNT	BUDGET	ACTUAL TO DATE	ACTUAL THIS PERIOD	VARIANCE TO DATE	TOTAL ACTUAL TO DATE			
4	01 01	25000	25000	8334					
4	01 05	8500	8000	2500	500-				
4	01 12	11000	9500	3500	1500-				
4	01 16	9500	17500	10000	8000				
4	01 17	3000	1500	1000	1500-				
4	01 24	1000	200	200	800-				
4	01 32	2500	6000	3500	3500				
4	01 33		560	560	560				
4	01 34	22500	21610	7300	890-				
4	01 35	8000	7500	2550	500-				
4	01 37	1000	800	300	200-				



might be represented by three cards, those for 100, 40 and 2 respectively. The prepunching is performed automatically.

As orders are received, prepunched cards for each item are removed from the reservoir file to make up the quantity specified. If prices change so frequently that the prepunching of price and extension is not practicable, the price is written on the order and punched in the card. From the punched quantity and price, the computation and punching of the extension are performed automatically.

If the product is received and issued in standard units, the reservoir file may become a stock

file containing a prepunched card for each unit in stock. Receipts are recorded by the insertion of additional cards in the file, disbursements by the removal of cards. The cards removed are used to print customers' invoices. Under this unit-control plan the prepunched file represents current stock at all times, and may be tabulated for periodic stock reports.

Under all the above methods the detail billing cards, or summary cards prepared from them, may be used currently in the accounts-receivable and inventory procedures. The same cards are finally available for preparing various statistical analyses pertaining to shipments.

CHAIN STORE INVOICE						OFFICE BILLING RECORD			
STORE NO.	MONTH	DAY	STORE LOCATION	STREET AND NUMBER	INVOICE NO.	STORE NO.	MONTH	DAY	INVOICE NO.
856	3	16	1	SELECTION LINE	2134	856	3	16	2134
118	1	24	No 2	CORN AVQN	12 2.88	118	1	24	2.88 2.00
122	1	24	No 1	PEACH SLCD	10 2.40	122	1	24	2.40 1.98
131	1	12		CANVAS GL	10 1.20	131	1	12	1.20 .80
133	1	12	8 02	CHERRIES	.08 .96	133	1	12	.96 .78
137	1	24	3	TOMATOES AVQN	15 3.60	137	1	24	3.60 2.40
141	1	12	8 02	PINE APPLE	.08 .96	141	1	12	.96 .76
143	1	12	8 02	RASP BERRIES	10 1.20	143	1	12	1.20 .96
154	1	12	WB	BEANS HEINZ	15 1.80	154	1	12	1.80 1.23
167	1	24	No 2	BEAN STRNC STAND	22 5.28	167	1	24	5.28 3.88

**THE NATIONAL MANUFACTURING CO.**

CUSTOMER'S ORDER No. & DATE 2105 4-21  
 REQUISITION No.  
 CONTRACT No.

702 BROADWAY  
 NEW YORK, N. Y.

REFER TO INVOICE No. 21156  
 INVOICE DATE 4-28  
 VENDOR'S Nos.

SOLD TO

GEORGE L HENDERSON CO  
 50 FRONT ST  
 TORONTO ONT

SHIPPED TO AND DESTINATION  
 DATE SHIPPED  
 CAR INITIALS AND No.  
 HOW SHIPPED AND ROUTE **Express**  
 TERMS: NET CASH 30 DAYS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
40	NATIONAL NO 17 TIRE GAUGES	72	2880
100	REPLACEMENT HUB CAPS	35	3500
20	ALUMINUM PISTONS NO 58	200	4000
5	EXCELLO ROLLER BEARINGS	75	375
50	SPECIAL SPARK PLUGS	100	5000
30	PARKING HEAD LIGHTS	150	4500
50	STOP LIGHT ASSEMBLIES	200	10000
100	WINDSHIELD WIPERS	180	18000

**COLLECTION RECORD**  
INTERNATIONAL PUBLIC SERVICE CORP.  
70 BROADWAY, NEW YORK, N. Y.

DATE	AMOUNT	DEPOSIT	SERVICE TO	GROSS AMOUNT	DESC
5 29			OCT 2	3.96	GS
			SEP 1	3.52	AR
5 29	3	5.00	OCT 2	1.92	EL
				.06	TX
			OCT	5.00	MD
DEFERRED					
MONTHLY BALANCE					
5	25.00				

\$14.46

**INTERNATIONAL PUBLIC SERVICE CORP.**  
70 BROADWAY, NEW YORK, N. Y.

METER READINGS		PERIOD		GROSS AMOUNT		NET AMOUNT		DESCRIPTION OF CHARGE	
PREVIOUS	CURRENT	FROM	TO						
1098	1062	SEP 1	1 OCT 12	3.96		3.96		GAS	
		AUG 1	1 SEP 11	3.52		3.52		GS ARS	
2466	2442	SEP 1	1 OCT 12	1.92		1.92		ELEC	
				.06		.06		U.S. TAX	
				5.00		5.00		MD'SE	

\$14.46 \$13.81

**CASHIER'S COUPON**  
INTERNATIONAL PUBLIC SERVICE CORP.  
70 BROADWAY, NEW YORK, N. Y.

CUSTOMER NUMBER	DESC	GROSS AMOUNT	NET AMOUNT
205	GS	3.96	3.96
	AR	3.52	3.52
	EL	1.92	1.60
	TX	.06	.05
	MD	5.00	5.00

\$14.46 \$13.81

TO: Wm. H. Campbell  
314 East 64th Street  
Apt 5-H New York City 125 - 050800  
**REAL ESTATE MANAGEMENT CO.**  
70 BROADWAY  
NEW YORK, N. Y.

**REAL ESTATE MANAGEMENT CO.**  
70 BROADWAY  
NEW YORK, N. Y.  
**CASHIER'S RECORD**

FROM		ITEM	TO		ARREARS	CURRENT	TOTAL	CODE			AMOUNT
MONTH	DAY		MO.	DAY				HOUSE	SPACE	ITEM	
5	01	RENT			125 00			125	50800	1	125 00
3	25	ELECT	4	27	874			125	50800	2	874
3	25	TAX	4	27	17			125	50800	3	17
3	27	GAS	4	30	180			125	50800	5	180
4	18	REPAIR			2850			125	50800	8	2850
6	01	RENT				125 00		125	50800	1	125 00
4	28	ELECT	5	26	819			125	50800	2	819
4	28	TAX	5	26	16			125	50800	3	16
5	16	REPAIR				565		125	50800	8	565
4	30	GAS	5	28		100		125	50800	5	100
							30421				30421