

CIRCULATES IN EVERY PROVINCE IN CANADA

The CANADIAN MANUFACTURER

The following Editions are published each month:
 "Power Edition," "Machinery Edition," "Office Edition," "Construction and Equipment Edition."

OFFICE EDITION

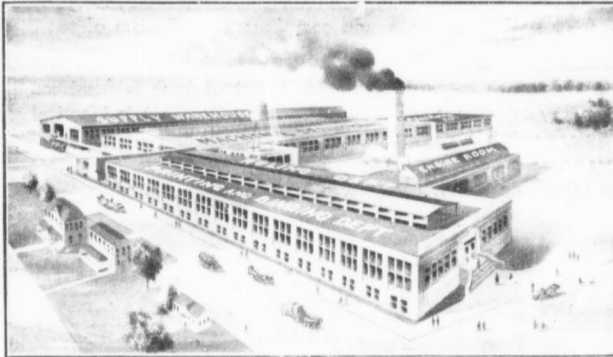
DEVOTED TO OFFICE WORK AND SYSTEMS

Vol. 57, No. 10.

TORONTO, OCTOBER 16, 1908.

New Series - Vol. 1, No. 6.

SPECIAL LINES OF LOOSE-LEAF SYSTEMS



FACTORY No. 1 AT BRAMPTON

The manufacturing of Loose-Leaf Supplies is not a business that can be pursued by the commercial prospector. It requires expert knowledge and experience to make it successful, or to make the output of real value to the consumer.

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We always have ready for instantaneous shipment, stock rulings and regular size binders and holders. Besides we stand uniquely equipped to furnish special rulings and binders promptly to order.

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Hotel Systems	Retail Systems	Holders for all descriptions of Loose-leaf forms	
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It doesn't matter what business you are engaged in. Write to us and you'll find us prepared with a list of good suggestions in accounting.

COPELAND - CHATTERSON - CRAIN, Ltd.
 Head Office, TORONTO, Canada



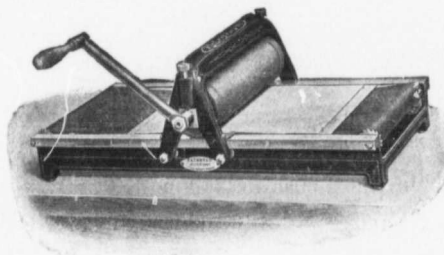
THE PERFECT DUPLICATING TYPEWRITER - PRINTING MACHINE

A great many duplicators have been put on the market, but none, up to this time, except the Polygraph have combined the essential features of simplicity, strength, durability and perfect work, with that absolutely necessary qualification—a minimum cost.

We claim that the Polygraph produces a better imitation of typewriter work than any \$150, \$200, or \$350 machine on the market, and the only machine that does work which a clever business man cannot detect from the individually typewritten letter, yet it costs but a quarter to a half of the prices of the other machines. The reason for this is that it has the exact typewriter impact, printing from type through an inked ribbon against a rubber roller and has not the delicate and complicated mechanism of the higher priced machines.

For circular typewritten letters the Polygraph is invaluable. A full font of type is furnished that matches that used on any typewriter, also any color ribbon for any make typewriter, that is identical with Polygraph ribbon, so that the body of a circular letter may be done on the machine and address and name filled in on typewriter, a thousand or more an hour, and the result is an individually typewritten letter which will not be thrown in the waste basket as so many of the ordinary circular letters.

See Exhibit
at
Business Show
Massey Hall
Week of Nov. 16th



The POLYGRAPH
is Simple,
Durable,
Efficient and
Practical

Electros, zinc etchings, cuts, etc., may be used, so that the various office forms may be printed at a saving of over 50% of printer's bills. The ribbon is used where line drawings or medium faced type are to be printed, otherwise the form is placed horizontally in bed of machine and inked by a roller.

The apparatus that comes with the machine makes it possible to do the work as easily as that of a typewriter, and a bright office boy would have no trouble in setting up a form and carrying through the full operation.

The Polygraph is a practical machine at a practical price, is noiseless in action, and is unsurpassed for quality of work by any machine on the market.

Write for Booklet and Samples of Work

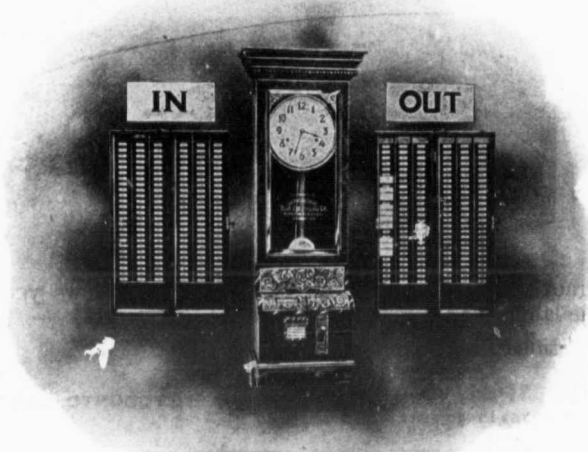
FRED. W. TENNEY, Gen'l Can. Sales Agent

Room 116, Stair Building, TORONTO, Canada

New York Office

The N. WALDO HARRISON CO., 52 William Street

How Many Profit-Eaters Are on Your Pay-roll?



Lots of 'em, unless you use International Card Time Recorders

These recorders quickly weed out the undesirables, tardy put-terers and point out the punctual, faithful money makers who are not working for Saturday night alone. Each employee must stand or fall on the automatic record he makes. It is infallible and always accurate.

Not only do they enforce punctuality, but industry as well,

for each employee must furnish a complete record of the exact time he spends on each job as well as the exact time he begins and quits work each day.

Let Us Thoroughly Explain Our System.

The Standard Time Stamp

Is the perfect machine for stamping the exact time that letters, telegrams or telephone messages are received or delivered, orders for goods received or filled, papers or documents filed, messengers started or returned. In short, any kind of transaction where record of time occurring or elapsed is required.

**Let Us Send You Catalogue of
Our Time Recording Devices.**



The International Time Recording Co. of Canada

Traders Bank Building

TORONTO

C O S T S

Where workmen are allowed to compute and record their own time, they often just guess and the account of the total cost of product is **NO BETTER THAN AN ESTIMATE.**

Time records, **MECHANICALLY ACCURATE**, shewing the actual computation of the time used, are printed by the "Chronograph."

**MECHANICALLY
ACCURATE**
ELAPSED TIME RECORDS



\$65.00

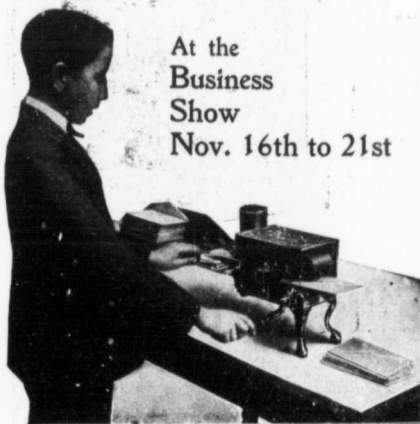
It gives you absolute accuracy on all time costs, on every job, and allows you to bring together without posting the labor of all persons employed.

See it in Booth 15 at the National Business Show, Toronto.

WOOD, GREEN SALES COMPANY, - 123 Bay St., TORONTO, CANADA
REPRESENTATIVES IN MONTREAL AND WINNIPEG

SEAL YOUR ENVELOPES BY MACHINERY

The "THEXTON" Envelope Sealers have proved themselves with eight thousand satisfied users.



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Hand Model, - \$25.00

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Senior Electric, \$80.00

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Sent to responsible firms subject to ten days' trial.

Absolutely guaranteed.

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A. C. NEFF & CO.
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 STENOGRAPHIC WORK AND QUICK COPYING
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 A SATISFIED CUSTOMER IS THE BEST ADVERTISEMENT



LOW CUT **HIGH CUT** **HIGH CUT**
 ORDINARY **ENVELOPES** WILL **OUR OWN**
 SECURELY
 CARRY
 CORRES-
 PONDENCE

DON'T FORGET—That the Back or Seal Side of an Envelope has a large value and only from that side can it be opened.

WE ARE
MANUFACTURERS TO THE TRADE
 SPECIAL SIZES OF ENVELOPES A SPECIALTY
Knapp Envelope Co.
 TORONTO, ONT.

MR. SUBSCRIBER:—

We find many of our clients are going carefully over their accounts and asking for new reports—some of them are sent to our Collection Department. Perhaps you may find a suggestion of value in this.

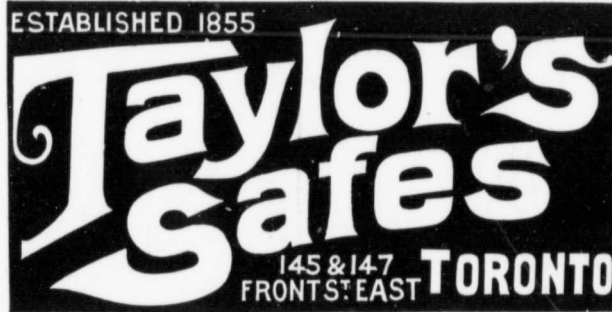
R. G. DUN & CO.

Circulars Should Be Well Printed.

- It costs as much to send a poorly printed circular through the mails as it does to send an attractive, business-getting circular.
- It takes as long and costs just as much to prepare your list and to address cheap looking literature as to address well-printed matter that is bound to arouse interest.
- Do not, therefore, skimp the printing. Insist on good work. The chances are, too, that the increase of cost will be slight, indeed, if you have your circulars printed by

The Commercial Press
 47 Lombard St., - - - TORONTO
 Phone Main 967

THE FIRST ESSENTIAL OF ANY BUSINESS IS ALWAYS ONE OF THE WORLD-WIDE FAMOUS



NO OTHER BUT THE **TAYLOR**, THE ACCEPTED STANDARD WITH AN UNEQUALLED RECORD OF OVER **50** YEARS. MEDALS AND DIPLOMAS FROM HOME AND FOREIGN EXHIBITIONS AND INNUMERABLE TESTIMONIALS.

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A few firms still use antiquated typewriters. In changing to a modern machine, it is safe to buy the Underwood visible typewriter, which has seen twelve years of progressive development towards perfection.

United Typewriter Company, Ltd.

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WE do printing in all its branches and in the best style of the bookmaker's art. Our plant is new and our facilities of the very best. We print Catalogues — the silent salesmen who tell the whole story; Booklets and Folders to reach established and prospective customers, "lest they forget"; Annual Reports, Magazines, Books, and Commercial Work of every kind.

We should like to place ourselves at your service.

WARWICK BROS. & RUTTER
Limited
King and Spadina - TORONTO

LOOSE-LEAF BOOKS

THIS is the age of labor-saving devices and office systems. We are manufacturing Loose-leaf Ledgers, Transfers, Sheets and forms of all kinds, and in any desired pattern. Our Ledgers are of established reputation. They are simple, strong, quick acting, neat and of the best materials throughout. Every Binder is guaranteed.

Special attention is given to mail orders.

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BOOKMAKING FOR BOOKKEEPERS

WE have one of the largest and best equipped factories in Canada for the manufacture of Books. For years we have made a specialty of Account Books, giving particular attention to "made-to-order" business, and many of the largest Banks, Loan and Insurance Companies, Transportation Companies and Commercial Houses are numbered among our customers.

Most of our workmen have been trained in our own factories and are therefore thoroughly competent in the various branches of the business.

We are glad to submit quotations at any time.

WARWICK BROS. & RUTTER
Limited
King and Spadina - - - TORONTO



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given in the well known, reliable Business Training School

The
*Central
Business College*
of Toronto

includes the use of all modern office devices for Copying, Filing, Duplicating, etc., and thoroughly qualifies Young Men and Women for active duty in up-to-date offices.

Students admitted at any time and office help supplied free of charge.

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E. R. SHAW, Secretary

Have You Thousands of Possible Customers?

Are there thousands of people who would use your product if they knew a little more about it?

If so, tell them in the one way that will attract and hold their attention — through individual typewritten letters.

We can process you the requisite number of typewritten letters — process them through a ribbon, so that an expert couldn't distinguish them from real typewriting—and do it at a cost that will be small in proportion to the results you will receive. We are ready to send you samples and prices.

THE
ACTUAL TYPEWRITTEN LETTER
COMPANY

511 McKinnon Building

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**J. L. Jones
Engraving
Co.**

WOOD AND
PHOTO
ENGRAVING
ELECTROTYPING
FOR ADVERTISING
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BAY STREET
TORONTO

NEAR THE CITY HALL
AND TEMPLE BUILDING

*Illuminated Addresses
from \$5.00 up*

FINEST DESKS MADE IN CANADA

DISTINCTIVE DESIGNS

PERFECT CONSTRUCTION

BEAUTIFUL FINISH



LIBRARY BUREAU DESKS give a DISTINCTIVE appearance to an office. They have no bulky pedestal extending to the floor under which stray papers or dust can collect. UTILITY and BEAUTY OF DESIGN have been the watchwords in their development. A NEW USEFULNESS is provided by SPECIAL ARRANGEMENT OF DRAWERS.

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BUSINESS SHOW**

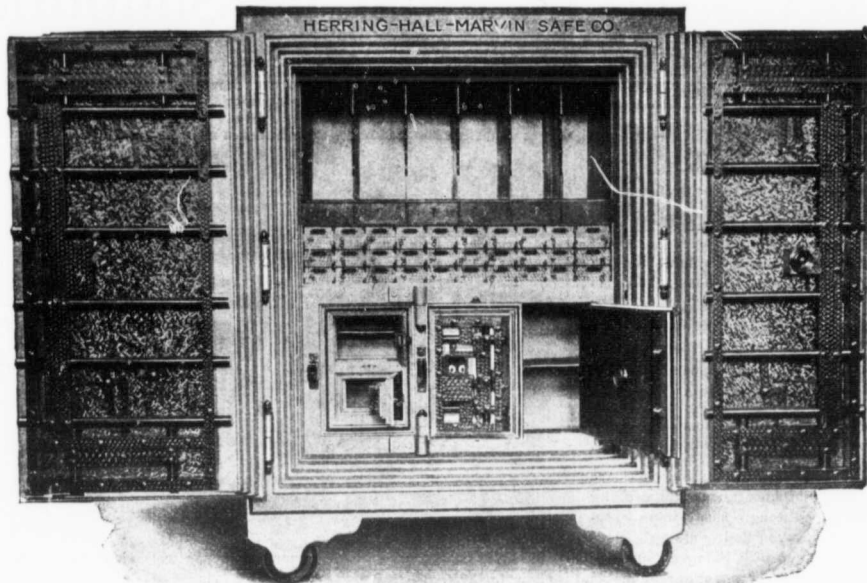
MASSEY HALL, TORONTO

MANY DEVICES NEVER SHOWN
BEFORE IN CANADA WILL BE
ON EXHIBITION

WEEK NOV. 16th

TICKETS OF ADMISSION CAN BE
SECURED FROM ANY EXHIBITOR

SEE LIST IN READING COLUMNS
ELSEWHERE



THE CANADIAN SPECIAL
THE FINEST SAFE BUILT

Wouldn't you

have a greater feeling of security if you knew your funds, documents, etc., were protected in a safe that is safe?

HERRING-HALL-MARVIN SAFES

are safe.

They embody 22 Distinctive Features, the real value of which any thinking man will appreciate.

Investigate their merits before you buy a safe, then you will have no need to do so later.

THE CANADIAN FAIRBANKS CO., LTD.

MONTREAL

TORONTO ST. JOHN, N.B. WINNIPEG CALGARY VANCOUVER

Office Routine Must be Simplified

GEORGE Westinghouse, the famous inventor of the air brake—so the story goes—gained the wonderful idea of applying compressed air for the stopping of trains from a magazine article about Alpine tunnel drilling with compressed air.

His subscription to the magazine was purely incidental—the result of solicitation by a little girl one summer day. The magnitude of the result all the world knows.

Now for the parallel :

Each month you will see here on this page an announcement of some kind about our Office Filing Systems and cabinets.

If—in this space—you discover one single valuable idea about Office Filing Methods; if—through illustration or description here—you find one single piece of "Office Specialty" Filing equipment that will reduce effort and expense in your office, you will indeed have been well repaid for the minutes spent in reading what we have to say.

One thing you must realize:—That the sum of money we are going to spend in this way would not be paid out unless we were sure "Office Specialty" Filing Systems will appeal to your best judgment in their time and money saving economies. Nor do we maintain the largest and most complete Filing Equipment stores in the large cities in Canada simply to reduce our bank balance. If you have a pride in your own business you will concede to us some satisfaction in the fact that we are to-day the makers of the largest and most varied line of filing systems and cabinets in the British Empire.

A stack of Sectional Filing Cabinets lends dignity to the private office and places within arm's reach the records vital to the work of the individual. The cost is small compared to the saving in time and effort.



Make your Office inviting. We can show you how to make your Office more attractive to your customers and yourself, and more than that—our suggestions may accomplish a more orderly arrangement and systematic conduct of your business records.



One word more—We have competent interesting and well-printed catalogs describing "Office Specialty" systems and cabinets in detail. We have also competent representatives who understand that papers and records should be indexed and filed to meet exact needs.

Both Catalogs and Representatives are at your disposal. A request for either or both will not obligate you, nor will you be importuned to buy.

The OFFICE SPECIALTY MFG. Co.
Ltd.

Head Office, Toronto

97 Wellington St. West

Factories, Newmarket, Ontario

Branches—Montreal, Ottawa, Winnipeg and Vancouver.

Resident Representatives—Halifax, Hamilton, Brandon, Regina, Calgary and Edmonton.

System of Material and Stock Keeping

Second of a Series of Articles Written for The Canadian Manufacturer, on Manufacturing Systems. The First was the Time Keeping System Which Appeared in the Last Office Edition. In the Next Office Edition will Appear the Third Article of the Series. It will be on Costs

By J.A.T., DUNDAS

Stock keeping in an undersized and poorly arranged store room with a careless or indifferent keeper, or as in some cases, no keeper at all, is a serious consideration and a great source of loss in any manufacturing plant. While a good-sized and well-arranged room is a source of profit in any establishment, whether small or large, but more especially in the larger concerns. A good and convenient store-room will be divided in as many sections as there are different classes of goods to handle, and the sections are sub-divided as necessary for the different sizes or quality of material in stock. It will also have a man in charge with the ability to control his stock;

cleaned by foundry laborers they are weighed, the weight marked on the specification, and then forwarded to the section of the works where the first machine operation is performed. The section (B) is marked on the specification sheet together with the date and number of pieces sent. The foreman of the section (B) to which the parts are delivered also receives a copy of the specification sheet, upon which he checks off the number of castings as received, thus making a double check on the material.

Similar sheets are provided for the forgings and other steel pieces required for the job. The number given to the steel parts may be distinguished from the castings by putting the figure 0 or a letter number before the number of the piece. Thus a piece with 1 on it we would know

NAME—30 inch Engine Lathe.			Date Ordered—April 2nd, 1908.			Date Wanted—July 30th, 1908.									
Castings Required			Job—7285			Mach.—100									
						No. Wanted—12									
Piece.	Description.		Special Pattern No. or			No. of Pieces.		Weight of one.	Where and When Delivered.					Memo.	
			Kind	length	diam.	Req'd.	In store.		Sec'n.	Date and No. of Pieces.					
No.	Sheet No.												Ap. 15	16th	18th
1	B 27	Bed.		14 ft.		1		3080	B	1	2	2	3		
2	B 29	Saddle				1		775	B	4	5	3			
3	B 29	Apron.				1		220	B1	3	4		23rd		
4	C 38	Saddle Strap	Pattern No. 102-6.			2		15	C	6	6				
5	C 38	Cross Slide				1	3	30	C	4	5				

Fig. 1.—Specification Sheet.

and he will be paid according to his ability. A man of this kind is worth considerable, but you will find it pays.

HOW TO KEEP YOUR STOCK.

In the article on Time-Keeping, which appeared in the last number of THE OFFICE EDITION we gave each job, each machine and each piece a number for convenience in keeping record of the time on the individual pieces as they pass through the several processes of manufacture, and these numbers will also be convenient in keeping record of the parts as they go from one section to another through the works. Again we will use the iron trade for an illustration. A list, which we will call a "Specification Sheet," as in Fig. 1, is furnished to the foundry foreman, which gives him all the information needed to furnish the required number of castings for the job in hand, as you see in Fig. 1. We are to build twelve 30-inch lathes, standard design, on job number 7285, machine number 100; for this we require twelve beds, the price number of which is 1, length 14 feet. When these are cast and

to be a casting; while a piece marked 01 or A1 we would know to be a forging by the designating figure or letter;

Charge to	Job or Lot No. 7285.	Date			
	Repair No.				
	Stock Order No.				
Quantity	Material	Description	Weight	@	Cost
12	Grub Screws	3/8" x 3/4"	....	04	.04
9	Semi-Finish Nuts	1/2" x 12P.	....	06	.05
	Babbitt	....	25 lbs.	10	2.50
.....Foreman.					

Fig. 2.—Daily Time Card.

and on the specification sheet for the forgings under the head—"Special pattern number or kind, length, diameter," you mark the kind of material from which the piece

is made; also the length and diameter. In Fig. 1 you will note under the heading, "No. of pieces required," that we call for one bed, one saddle, two saddle straps, etc. This, of course, is for the number of pieces required for one machine, the reason of this being that these specification sheets may be again used for the next order for the same style and size as the present one, the dates and numbers of job, etc., only having to be filled in for the next lot. It may then be for any required number. Under the heading, "No. of pieces in store in rough" may be put the number of pieces made for a previous order, but for some reason not used.

These can now be used, and as there are three pieces of No. 5 in store the foundry foreman understands that there will be but nine pieces of this number to be made to complete this order. If these pieces had been machined before, being put in stock the figure 3 would have been put in "finished" column instead of in "rough" column.

The above specification sheet will answer for all work done on the premises, excepting such small pieces as are made in quantities on automatic machines, etc., and carried in stock for general use. These small parts may be made under a separate number, called a stock number,

piece, per number of pieces or pounds and all other information required. For instance, on April 27, 1908, we ordered from Brown & Co., Toronto, five hundred (500) $\frac{1}{2}$ "x16 P. semi-finished nuts. We place date of order under "Date" on debit side of sheet with order number on same side of sheet in its proper column with quantity ordered (500) in its column. Of the quantity ordered we require 150 for use on order 2272. The 150 is placed in "Required" column, leaving 350 available for other purposes. On May 2nd, we receive only four hundred (400) on order 5642, with invoice rating them at \$5.00 per hundred. We note this at the head of sheet as provided for. They also inform us that the remainder of our order will be sent us about May 5, which information we also note under "Memo," having only received 400 nuts on order 5642. We record this on the credit side of the sheet under "Quantity Received"; also under "Quantity on Hand," place 400 as you now have them in stock.

On May 2 a call is made for the number required on 2272 order. These are delivered and the number (150) placed in "quantity used" column, leaving 250 still on hand. On May 5 the balance (100) order 5642 arrive,

Section G 4.		STOCK RECORD.					Folio 1.		
		Of $\frac{1}{2}$ " x 16 P. Semi-Finish Nuts.					Sheet No. 1.		
Date	May 2, 1908	May 10th							
Cost Per 100	\$5 00	\$4 50							
Order No.	* 5642	5836							

Memo.	Date.	Order No.	Quantity in Pieces.			Date.	Order No.	Quantity in Pieces.		
			Ordered.	Required.	Available.			Received.	Used.	On Hand.
Bal. will be shipped.	April 27, '08	5642	500		350	May 2nd.	5642	400		400
May 5th, 1908.		2272		150		May 5th.	2272		150	250
	May 7th.	5836	1000		1000	May 5th.	5642	100		350
						May 10th.	5836	1000		1350

Fig. 3.—Stock Record Sheet.

which should be distinct from the other numbers used which should be written 2072 S., the S indicating stock. Care must be taken in this to prevent any possible confusion of numbers.

When this order for stock is completed it is sent to the store-room, where the order sheet is checked by the store-keeper signed and returned to the office that issued it. From this store-room all small material such as screws, bolts, etc., are distributed to the workman on order of his foreman.

A card of the same dimensions as the daily timecard should be used, as in Fig. II., on which are spaces for Date, Number of Job, and Machine, Number of Pieces and Description, thin spaces for cost, which will be inserted by the store-keeper from his stock record sheet, sent to the time and cost department to be filed away under the job number for which they are taken.

Now for keeping record of the stock in store-room I would suggest a Stock Record Sheet, Fig. III., which gives you the name and description of the article, the section of the store room in which it is kept, the price per

and are placed in "Received" column, leaving now 350 on hand for future calls. On May 7th we order under Order No. 5836, from Jones Bros., Montreal, one thousand nuts of the same dimensions, receive them on May 10 with invoice @ \$4.50 per hundred. We note this also in "Cost Column" at the head of the sheet. This immediately tells us that this style of nut can be purchased from Jones Bros. for 50 cents per hundred less than from Brown & Co.

When these nuts are received they are placed in Sec. G., in store room, (as all nuts are kept in Sec. G.), and in Box 4, which box is kept for that particular size and pitch. When this stock record sheet is filled, it is filed away under folio and sheet number, as on top right hand corner of sheet. All material of whatever character if kept in stock is handled in the same manner, this record sheet answering for all.

Material in process of manufacture being sent from one department to another is cared for by the specification sheet (Fig. 1) under the head, "Where and when delivered."

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OF THE
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Montreal Office—204 St. James Street,

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WM. TUCKER & CO., Representatives**SUBSCRIPTIONS:**

Canada \$1.00. United States \$1.50 per year. All other Countries
in Postal Union six shillings sterling, including postage.

ADVERTISING RATES:

Made known on application to 408 McKinnon Bldg., Toronto

WHAT DOES YOUR PRODUCT COST YOU?

No progressive manufacturer in Canada to-day would deny the necessity of a good cost system, if the question were put straight to him. But the fact remains that many manufacturers, who would wish to be known as progressive, have not a good cost system.

Probably all have some sort of system for discovering the cost of their product; but with many it ends there. Their system shows the cost, but does not show how that cost is made up. It does not point out where the cost of a certain detail part runs above or below the cost of the corresponding part of the machine in another shop order. It may show that the complete cost of the machine runs too high; but there is no indication of which particular part was the cause. It does not point out a way of getting at the root of matters.

Such a cost system cannot be called a good one; and the manufacturer who is satisfied with such a system, cannot be called a progressive manufacturer.

Then there may be the other extreme. A firm may have a system that will tell everything about the cost that one could possibly wish; but it may be so cumbersome, and so much clerical work may be required, that the expense of upkeep may eat up all the profits of the business. There is always the danger of this when a system is being devised for a large manufacturing plant. Neither can a cost system of this kind be regarded as a good one.

To get a good system it must be devised specially for the work it is to do. From descriptions of successful systems in operation a manufacturer can get many suggestions which may help him to devise one for himself or improve the one he already has. Many such articles will be published in **THE CANADIAN MANUFACTURER**, particularly in the Office Edition. No manufacturer should miss them.

WHERE SUGGESTIONS WERE PAID FOR.

In a large establishment where the management cannot come into actual contact with all the little details of the business, a plan which has been adopted with good results by many large firms, is of offering prizes to employees for suggestions whereby the efficiency of the business may be increased. It is the close regard for detail efficiency that places lots of firms ahead of their competitors. The management cannot come into contact with all the little things. But if an incentive is given all the employees to watch out for means whereby money can be saved the firm, whereby the product manufactured could be improved to advantage, or whereby the the business of the firm could be increased, and suggestions made to the management, it would prove a paying investment.

An incentive must be given however. Human nature demands it. It is right, too, that such should be given. The management must show the employees their efforts along this line are valuable, else the employees themselves will not think so.

Some years ago the Yale & Towne Mfg. Co. inaugurated a system of awarding prizes for suggestions from its employees. This gave excellent results. In the first half year 1,700 suggestions were received, 25 per cent. of which were accepted by the company. The financial returns from these 425 suggestions which were adopted, more than paid for the outlay required during the half year. Besides a good deal of interest and enthusiasm was aroused among the better class of employees, the value of which to the company could not be brought down to a dollar and cents basis with any degree of accuracy.

An account of this system will be found in another part of this issue.

A PAPER FOR THE PRACTICAL MAN.

It is the desire and intention of the publishers to make this issue fully as valuable to the managers and superintendents of manufacturing plants as to accountants, book-keepers and others intimately connected with office work.

We propose to deal in this edition with the intricate problems of manufacturing such as cost accounting, purchasing, sales management, book-keeping, collections, etc., such as relate to office and executive work.

We do not propose to refer in this issue to the problems associated with the generation or distribution of power; such questions will be fully discussed in **THE POWER EDITION**.

Nor in this number will we give attention to the work and needs of the machinery shop or foundry; these will be taken up in a broad, specialized way in **THE MACHINERY EDITION**.

Nor will this edition deal with questions relating to factory or mill construction nor to the equipment of various types of factories, shops, etc., such matters will be taken up in **THE CONSTRUCTION AND EQUIPMENT EDITION**.

This issue, as its name, **THE OFFICE EDITION**, implies, will be especially devoted to the problems of the office, the questions of organization, management and systematizing. It will, however, be our constant aim and purpose to deal with the larger problems of manufacturing in such a way that every owner, every manager and every superintendent of manufacturing plants throughout Canada, as well as every accountant, book-keeper, sales manager and purchasing agent will find it worth his attention because of the valuable suggestions it brings to them.

Filing Catalogues and Price Lists

System of Filing Together Catalogues and All Information
Relating to Prices, Discounts or Shipments. Systems Used
by Chas. F. Dawson, Montreal, for a Number of Years.

By A. B. FARMER

What to do with catalogues, price lists, etc., is a problem that at some time or other faces every man in every line of business. They come in by every mail, too often find their way into the W.P.B. without more than a hasty glance, and it is only later, when the receiver has a hazy idea that somewhere he saw a catalogue relating to the machine, or whatever it may be he wants, that he realizes that he made a mistake in throwing that catalogue away.

Being human, he next day throws three or four more catalogues away one at least of which he will want before a year is over.

A very simple and complete filing system was recently shown to the writer by Mr. Chas. F. Dawson, the head of one of Montreal's largest stationery concerns. This system has been in use for a number of years, and as it is quite applicable to the need of a concern of any size, it is well worth a brief description.

The first problem in caring for catalogues is where to put them. Large bound catalogues are all right in an ordinary bookshelf, but the small ones, the pamphlets, folders, and single leaflets, are often quite as important in their way, but they are woefully easy to lose.

This difficulty has been overcome by the use of ordinary letter files. In these, the small catalogues, etc., are filed alphabetically under the name of the issuing firm. As soon as one letter file is moderately filled, another is started.

For indexing, an ordinary two-column ledger index is used. In one column the names of firms are entered, with the number of the letter file, in which their catalogues will be found, if they are small. In the other column, the names of articles are entered, with the name of firms in whose catalogues they are listed, and where the catalogue will be found.

All price lists or letters relating in any way to goods, prices or terms, are at once side tracked in the manager's office, and instead of being filed with general correspondence are put with the catalogue or catalogues of the house from whom they come.

A convenient drawer is kept where all catalogues, price lists, etc., are allowed to collect as they come in, and from which they are taken every few days by one of the clerks, and duly filed and entered, when necessary, in the index book.

Such a system as this, if systematically carried out, is often of great value to the concern. For example, a man has a half-developed idea of some office device that he thinks he could use. He has heard of such a thing, or seen an advertisement, but he has forgotten where, or what it was called. This often happens. He calls on a stationer, and tries to explain what he wants. Nine times out of ten the clerk never heard of such a thing, thinks the enquirer is crazy, and shows it.

When such an enquirer calls on the firm mentioned (Chas. F. Dawson & Co.) he meets a different reception. The filing system has been in operation for years, and the salesmen trained to use it. Perhaps the clerk has never heard of the article wanted, but he can find out. The enquirer is taken up to the office. By reference to the index, the clerk is soon able to produce the catalogues

of all the firms likely to have such a line. The chances are that the exact article wanted will be found within five minutes, and as all data regarding prices, discounts, shipments, etc., are filed with the catalogue, the clerk is able to at once quote a price for the article laid down. It means not only a sale, but probably a permanent customer.

The plan of filing all information in any way relating to prices, discounts or shipments with the catalogues is one that can be profitably adopted by any concern that buys. It saves time and avoids many mistakes. Prices and discounts are rarely referred to except when the catalogue is also being consulted, and catalogues are scarcely ever consulted without reference to prices.

Any office boy or girl can keep such a filing system in good order in a few minutes a week. The gains from such a system are often very great.

The Use and Abuse of Half-tones

By JAS. F. TOBIN.

Bill Nye said of Wagnerian music, "It isn't as bad as it sounds." This might be paraphrased concerning half-tones. Some of them are not as bad as they look.

A half-tone is only as good as it's printed. The finest one ever made, will look "fine" only when the printing conditions are such as to display its good qualities.

The relations between half-tone, printing, and results, are absolute. Given any particular half-tone and quality of paper and a good printer, the result can be predicated accurately.

The 175-line screen calls for the best coated paper—first-class printing—and a pressman who is "on his job."

The 150-line screen is just a grade lower; it requires good coated paper, good printing, and a good pressman to handle it.

The 133-line screen is the all around business screen. Runs well with ordinary printing.

The 120-line screen can be used on "supers" and show good effects. The 150, 133 and 120 screens can be electrotyped with excellent results.

The 100-line screen is sufficiently open for rapid printing on machine-finished paper—a first-class trade journal screen.

The 80 to 65-line screen are "newspaper screens." Good for cheap circulars and fast printing—can be stereotyped successfully.

A half-tone with a vignette finish should be used only with good paper, where the printing is first class.

For trade journal uses, either a square finish cut—with or without a line around it—or an outline cut, are unquestionably the cuts to use.

An inspection of the half-tones in the ordinary trade journal will show that "outline finish," 100-line screens print best.

A good half-tone in the hands of a good printer can be counted on for many thousand good impressions more than the same half-tone in the hands of a "near" printer.

The last word has not yet been said about half-tones. The engraving processes are improving so rapidly that it is always worth while consulting a good engraver before ordering cuts, so as to keep up-to-date.—Selling Magazine

With the Men Who Purchase Supplies

A Splendidly Written Article, Showing Up the Methods Employed by, and the Characteristics of Various Types of Purchasing Agents. Reprint from the Saturday Evening Post, Copyright by The Carters Publishing Co., 1908.

By JAMES H. COLLINS

A large factory needed some new machinery of a type and quality built by only a single house in the United States. That restricted its purchasing agent, because he could not pit one house against another in buying. Moreover, the concern that built this sort of machinery was reputed to be unshakable in catalogue prices. A crusty old firm, grown opulent in the trade, it had a crusty old selling agent named Babcock in the city where this factory was located.

Old man Babcock was assumed to be just like Caesar's wife when it came to catalogue prices. Purchasers hesitated to ask him if that was the least he would take. For years he laid back on the mighty reputation of his house, and if anybody protested, "Yes, Mr. Babcock; but we have quotations twenty per cent. lower from other houses in your line," the veteran stiffened instantly:

"Sir, I have quoted you the catalogue price of Sterling & Leeds—there are no other houses in our line!"

The president of the factory corporation said, however, that it would do no harm to have a look inside the old chap before buying, just to see how solid he really was. So a little comedy was rehearsed by the purchasing agent and himself, and one afternoon when it was ready to be produced, Mr. Babcock got an invitation to come up to the works and give prices on some new equipment.

Arriving at the factory, the selling agent was asked to wait a moment in an anteroom. Old Man Babcock was hardly seated before two men came into the second room, talking in tones that were subdued but distinct. One was the president and the other the purchasing agent, and they appeared to have some mighty confidential business to discuss. The selling agent was an honest old chap. But in a moment he was intensely interested, and had heard enough to make it difficult to announce his presence and get away.

AN EIGHT-HUNDRED-DOLLAR COMEDY.

"Has Mr. Babcock given us prices yet?" asked the president. "Sterling & Leeds will probably want about fifty-eight hundred dollars for that machinery. We needn't put more than five thousand into this new equipment. If your other party will meet our specifications for forty-six hundred and fifty he's undoubtedly the man to have our order."

"But this other stuff isn't Sterling & Leeds, you know," warned the purchasing agent.

"I know that, Bert. But what of it? Isn't there a good deal of superstition about the Sterling & Leeds reputation? Look at their gears, for instance. Look at their bearings. In some respects they're twenty years behind current practice."

Then objection after objection was brought against the machinery really wanted. The purchasing agent held out for Sterling & Leeds, but was finally persuaded, and the two went out.

From another room the effect on Old Man Babcock had been carefully watched. Toward the end of the prearranged talk he had sat drinking in every word, as if petrified. When he entered the purchasing agent's office he wanted a little more time to look into those specifications. With an important order like this there *might* be ways in which he could save the factory money.

Would he have his prices ready this afternoon? asked the purchasing agent—the matter was pressing. Oh, yes! within two hours. As soon as he could get away the veteran hurried to a telephone, got his house on long distance, and held an extended conversation.

That factory got its Sterling & Leeds equipment for an even five thousand dollars!

The purchase of raw materials, equipment and supplies for a large mercantile house, a factory, a railroad system, is work of infinite variety. Sometimes a bit of neat fencing is needed, as in this case. Again, only the utmost openness will answer, and the purchasing agent buys of men who have long been his personal friends. The character of goods must be taken into account, and sometimes forecasts made of future conditions. One man will buy largely on his knowledge of the market, and another depends more upon his knowledge of men. Under some circumstances the buying end of a business may be conducted as a separate entity. Under others, it must be linked in with other departments to benefit the business as a whole.

In one of the minor technical industries there was a pert little company making supplies. It held its own, and perhaps a trifle more, against a combination of several larger houses that was known, of course, as the "Trust." This little concern had a few desirable patents, a great deal of good-will, and several very capable men. To get the latter the Trust bought it outright. One of the best men was a salesman whose personality, energy and acquaintance had made him conspicuous in competition. The Trust asked him if he would enter its service at a higher salary, and the salesman said he would think it over. He thought twice, and decided to get into a new line. Salary was tempting. But now there would be no more fighting in that industry, and he enjoyed competition, because he was the kind of man who usually won. Then, he had been on the road fifteen years, selling one thing and another, and saw his family hardly once a month. He concluded that he'd better have a change—a new occupation in a new field. So he got a position as purchasing agent for a large company, and out of his knowledge of selling goods built methods of buying them.

This factory made many different products, and spent several thousand dollars a week for materials and supplies. Some came through staple channels of trade, where little selling skill was needed. But, for the most part, purchases were made of houses that had the best salesmen obtainable. Each day he would have to see twenty to thirty expert salesmen. Within certain limits the latter might pick their own day and hour for calling on him, presenting their propositions when they were in good trim. He, on the other hand, must receive them as they came. Nine in every ten were men of the nicest judgment; thoroughly skilled in presenting a proposition their way; capable of making black look like white; wise as the serpent in their management of difficult people; in fact, men very much like himself.

Once, in his selling career, he had tamed a noted dyspeptic, the fussy old buying partner in a fussy old house, feared by salesmen, guarded like a Grand Llama

by a staff of absolutely devoted clerks—as the business dyspeptic often is, for some reason. This ex-salesman had tamed him in two visits, on the theory that there must be some decency about a man who held the love of his subordinates. The first lasted three minutes, and was made expressly to let the old chap "cuss" him. On going out he said, "It's too bad you're so all-fired cross this morning, Mr. Spleen." The second visit lasted much longer.

Going straight past the clerks, he got across the wide office as fast as his legs would carry him, and before the sour old face was raised laid a hand lightly on the old fellow's shoulder and said, "Mr. Spleen, it would put anybody in good humor to see you so cheerful this morning. I'll bet you're just punishing the work." That day he stayed two hours, sold a heavy bill of goods, and made a dyspeptic but steadfast friend.

Well! And now this was the sort of thing he had to meet from the other side of the bargain. These salesmen had information he needed. They could do him many a good turn if he made them friends. Yet he dare not let them impose their own points of view or control him by personality. That way lay shortsighted buying. The first four or five men who came in the morning he could beat at the personality game. But then he would be tired and easy picking for twenty-five others.

THE REFORMED SALESMAN AND HIS METHODS.

His office was arranged in an ingenious way: A solitary chair stood some distance from his desk, with light from the windows falling full on anybody who sat in it. There were no other seats in the room. His desk was so placed that a visitor found it awkward to reach over and shake hands on coming in, and easy to walk over and sit in this chair.

A salesman entered, took the chair, and began his talk. The buyer was always cordial. As the salesman gauged his man and warmed up to his argument he invariably tried to move that chair nearer the desk. But it never moved an inch, because it was fastened to the floor. The buyer's own chair was on a swivel, and, perhaps, as the salesman talked, he turned and looked absently out the window. This arrangement made the office not unlike a court, where the prisoner comes with his cooked-up story, and finds himself in strange surroundings. Before him a keen judge. Behind, an officer who nudges him in the ribs and asks, "Why don't you answer his Honor?" Two questions and the prearranged story is driven out of his mind, and he is thrown directly on to the facts.

This was only the visible stage machinery, however. A purchasing agent who has never sold goods himself will frequently act entirely on the defensive in buying, taking the side of the house and meeting the seller point by point. But this ex-salesman usually took the seller's side, and made a dummy opponent of his house.

A new device being brought to attention, he listened to the argument, made inquiries, and asked that a sample be left for a few days. When the salesman returned he said:

"We've looked into this thing. Personally, I am favorable to it. The idea is excellent and new. In fact, too new. You know a board of directors is difficult to persuade. Our directors are broad-minded men. But they fall into errors of judgment. They have in this case. I am sorry to say we are not in accord about your device. Yet my own confidence is so great that I am willing to stretch a point if you help me. If we install this device, you see, I take the risk. I must have your co-operation in every way. Will you give it?"

The answer was obviously affirmative. Then, with the common enemy of a hostile board of directors to

overcome, the prices, discounts, terms could often be made exceedingly attractive.

Another device common among purchasing agents is that of playing poverty. No matter how many millions a corporation may have, its purchasing agent can always be poor. Half a million dollars passes through his hands yearly. But he explains that it comes in quarterly appropriations. He is just squeezing through the second month on three dollars and sixty-eight cents. Your proposition attracts him, but he hasn't any of his appropriation left. And so the seller is led to make his proposals exceptionally tempting on the chance that the buyer will be able to borrow a little money of his wife.

In business generally there are hundreds of houses that never shade their established prices in any way. No skill or trickery in buying can bring them down a penny. Where it is obviously impracticable to beat prices down, however, the purchaser may be very successful in beating them *up*. For the same price he may secure three-X quality instead of ordinary grades; or, to the goods themselves may be added valuable service.

The sales-manager of a specialty house went out on the road, visiting his salesmen. Every man he talked with had the same grievance. Goods sometimes came back to the retail merchant for repairs, and the latter then shipped them to the factory. Everything was sold with the guarantee to dealer and consumer that repairs would be made free and defective goods replaced. On paper this guarantee was a strong selling argument. But in actuality the goods went back to the factory, were kept weeks, and sometimes lost. Correspondence was often ignored. Everybody hated the repair department.

At the factory it had been thought that this repair department was a minor detail that ran itself. Nobody had paid much attention to it. The sales-manager hurried back and investigated. He found the clerks copying each complaint in long-hand five or six times, and correspondence being thrown into a big box. The harder a complainant kicked, and the oftener he wrote, the less inclination there would be to hunt through that box, get all the papers, and take the case up systematically.

BIG BUYING AND LITTLE BUYING.

That department must be reorganized, of course. The sales-manager called in typewriter men, patent sales-slip men. These people were working every day on just such problems, and had experience covering the whole range of business.

"We will buy goods of you only on condition that you devise a system for that department," he said. Within a few days the salesmen came back with systems all drafted out. One man brought an entry form on which a single boy could write particulars of each complaint received, making five carbon copies for people who subsequently handled it. The typewriter salesman submitted another form whereby, at one writing, a complete record was made for the books and an address slip written for shipping back repaired goods.

Price and terms are by no means the chief consideration in buying. The service a seller will give under a continuous relation may be far more important than petty savings. The man who buys printed matter for a large Eastern house, for example, throws ninety per cent. of his patronage to one printer. On each contract, though, he obtains several competitive bids, so that average prices may be gauged. This one printer gets the business, and because he has a continuous relation with that buyer relieves him of much detail work—*hunting up* new materials, experimenting with various papers, inks. Ten

per cent. of the buyer's patronage goes to other firms, thus keeping the competitive interest alive. The printer who gets ninety per cent. always bids with the chance of losing. Before this buyer took charge his firm had given all its trade during ten years to a single printer, without bids. That bred petty perquisites, such as an annual charge for storing type and engravings that another printer would gladly have stored free.

There is *big* buying and *little* buying.

The purchasing agent for a certain house bought in a truly big way. Where others haggled over price this man said, "All right, I'll pay what you ask—now what are you going to give me additional?" He made a contract for fifty thousand dollars' worth of street-car advertising space the price of which is fairly constant. Service began in a dull season. "Start it two weeks earlier," he suggested; "it costs you nothing." That was done. Two weeks were tacked on to the end of the contract. He found idle spaces in many cars and asked for those. In the end he got a month's free service on the whole contract, and had the use of several thousand card-spaces during the dull season free of cost.

This man always attended to the main points of a deal, and then turned the seller over to an assistant, who crowded him a bit on minor points—did the *little* buying. Then the deal came back to the big buyer for closing. Eventually, this buyer went to another house, and his assistant was promoted. To-day that former assistant gets all the minor concessions a little buyer can obtain, but none of the big ones. The house, like many another, is immensely impressed with these little concessions, and never looks into the wider aspects of a deal.

This is an era of trade associations, price agreements and trusts. The purchasing agent frequently finds all the houses in a given trade quoting the same price. In printing, for example, the bids of six large concerns in New York or Chicago will often be within a few cents of each other, because a bureau is maintained expressly to keep up prices in an industry that was hotly competitive a few years ago, and there is a wise official who does little else than adjust the prices.

An occasional and capricious buyer stands little chance of getting inside rates in the face of such an association. But the large buyer who has been liberal in his past dealing and made friends of the men from whom he buys, will seldom find such organizations altogether insurmountable.

TAKING CARE OF THEIR FRIENDS.

The purchasing agent of a large railroad system says, while prices of supplies have been raised by agreements the past few years, still he has never failed to get his own supplies at less than association schedules. Somebody always takes care of him. When he has bought supplies of the same manufacturer year after year, that manufacturer isn't going to throw him over for nothing. Perhaps he has no such friend in the trade. Well, then, doubtless some wavering member of the association considers this an excellent time to make friends with a big railroad. The strongest association cannot last forever. Some may not last till next week. Railroads, however, will always be running, and they will always need supplies.

The buyer who has no friend in such an organization may still find a weak brother if he goes at it diplomatically.

Two manufacturing houses in the same industry were getting supplies at association prices. In one the purchasing agent was an ambitious, prying youth, not very wise in the ways of this world. The other house had a purchasing agent who was born about 1850.

The youthful buyer thought the association weak somewhere. So he sent a letter to each firm in it, offering a tidy contract for a concession in price. The latter was masked by an exchange of merchandise. His offer was skillfully put together, and so tempting that each member went to the next association meeting prepared to sound others.

"Oh, yes—by the way," one would remark casually, "what do you hear about the Amalgamated Company?" Replies were guarded. After five or six had arrived, however, and curiosity was expressed as to what was being heard about the Amalgamated, the cat was out of the bag. When a late arrival came into that meeting and made a casual remark about the Amalgamated there would be a chorus of, "So you got one, too!" All knew that the others had been approached, and nothing came of the young purchasing agent's offer but a funny story.

The other purchasing agent, however, heard the funny story, saw the strength of the offer, and the weakness of the way it had been advanced. After a few weeks he called on two or three members of the association, made each the same offer on a part of his supplies, and said, "You look like a sensible man—take it or leave it."

"H'm! Has this proposition been made to any other house?"

"No; not a soul knows about it except you and myself."

"All right; we accept."

The association idea has lately been adapted in an ingenious way to buying supplies. About a year ago each branch of a telephone company abolished its local purchasing department. An allied corporation in Chicago, manufacturing all the apparatus for hundreds of separate companies scattered over the country, now buys supplies through a great department. Formerly, for example, each company bought its own pencils. Now, the purchasing department in Chicago investigates pencils, settles upon standard kinds for telephone work, and goes into the market, for, perhaps, a million. A very low price is naturally obtained on such a gigantic order, and the pencils are then forwarded to any company on requisition. This plan not only results in the saving on hundreds of supply departments, and gives supplies at lower prices, but has been a means of standardizing nearly everything used in the telephone industry.

THE PERSONAL EQUATION IN BUYING.

The forms of pressure brought to bear upon a seller by a skillful purchasing agent are almost as many as the forms of pressure the salesman can bring to bear on the buyer.

Some years ago a patent-medicine house sent a man over the country to purchase advertising space in second-rate newspapers. This buyer found that so long as he stuck to a discussion of rates per line the deal was more or less abstract. A publisher became so interested in maintaining his rate that he lost sight of the money he was going to get. So the buyer put that money in concrete form. Stepping into a bank, he would get five hundred dollars in one and two dollar bills. Little time was wasted in discussion.

"Here's a schedule of the space I want," he said, "and here's what I'm willing to pay—take it all; I haven't counted it." Then the money was strewn over the publisher's desk. Two hundred one-dollar bills will carpet a large flat-top desk three deep. The contract was seldom refused—and it called for about two thousand dollars' worth of advertising space!

When it comes to purchasing supplies for a railroad, however, there is less opportunity to gain advantage by sophistry. The merchandise dealt in is likely staple stuff, such as oil, waste, steel rails, spikes, castings, bar

metal, structural shapes, ties, lumber. Much of it is bought in conformity to specifications furnished by the traffic and other departments; practically all of it bought year after year on contracts, and prices vary so little at any given time that the purchasing agent's effort is directed chiefly to forecasting the future from his experience of the past.

Yet the personal equation in buying can be very definite, even here.

When the purchasing agent for one large system took charge, some years ago, he found that contracts ran from January 1 to December 31. This brought expirations in the busiest season of the year, when prices were likely to be highest. So he adopted the fiscal year ending June 30, thus throwing expirations into the dull summer months, when it was most logical to go into market for new prices.

Some railroad purchasing agents hesitate to deal with sellers in friendship. In connection with all buying will be heard ugly rumors of commissions and "tips" given purchasing agents by sellers. There is undoubtedly a good deal of such dishonesty in business as a whole. But the rumors are usually much larger than the secret commissions. A veteran purchasing agent explains, for instance, how the directorate of his road includes men who also sit as directors on half the other big railroad systems. Any one of them might, at any meeting, call for schedules of prices being paid for supplies, and compare these with prices paid by every other road in the country. Commissions would make a noticeable difference in prices. Then, if a purchasing agent accepted a commission from a salesman, the latter's house must know—the president, the treasurer, the bookkeepers. It could not be kept secret.

Selling Power Plant Steam Specialties

The Kind of Copy that Pulls in Advertising Steam Specialties. Treating of Specific Installations and Suggesting General Applicability of the Apparatus by Means of Diagrams, Facts and Figures. How Enquiries Rapidly Decreased and Finally Ceased Entirely Within a Year After Advertising in Technical Journals Was Discontinued

BY S. E. BRYNER* IN SELLING MAGAZINE.

It would be superfluous to say that the vending of power plant machinery must obviously be conducted along a different line of action from that of any other class of merchandise; but we might even go farther, and say that nothing that is made and sold requires just the same measure of analytical study to bring about results, based upon correct scientific procedure, as the field of mechanical products, with its multitude of ramifications. We can divide and classify it almost to the degree of illimitability. Take, for example, power plant specialties. Within this category is embraced a vast number of machines, articles and apparatus of varied kinds, each differing from its neighbor in some essential particular, but all tending fundamentally toward one end—economy.

There arises in connection with the marketing of even so seemingly a simple thing as a steam trap some pretty problems that will tax the ingenuity and creative mind of the sales specialist, if he will but stop to analyze them.

PERFORMANCE IS OF FIRST IMPORTANCE TO THE BUYER.

The successful sales campaign must be conducted along educational lines, by which I mean a setting forth in comprehensive form the possibilities in the shape of duty or duties which the devices will perform, as well as a detailed description of the manner in which they should be applied.

To illustrate: Every steam using plant produces water of condensation which is steam condensed and returned to its original form—water. Steam traps primarily are designed to perform the function of extracting from the steam pipes the accumulations of condensed water, discharging usually into a hot well or receiver of some kind, or even out-of-doors to waste. It would appear the essence of simplicity to advertise a steam trap, of say, ordinary design, indulging perhaps, as the average advertiser is wont to do, in a prolific presentation of the claimed superlative qualities of the contrivance from the standpoint of make-up and the wonderful saving that its employment will effect; all this in broad generalities. But, while that is good, so far as it goes, it does not

in my opinion, go far enough. One manufacturer can sing a song just as alluring from the general standpoint of merit laudation as another, and the prospective buyer has little or no means at his command to differentiate between tweedledee and tweedledum. Let the seller, on the other hand, present his case seriatim, so to speak; proceed along educational lines; point out step by step the natural sequence of transpiring events from an engineering and scientific standpoint, not merely contenting himself with a flight of panegyrics, but striving to interest his prospective buyer in the individual problem with which he (the buyer) is contending, and present its solution. With the steam trap, for instance: he would make a thorough inspection of the plant, covering the conditions of pressure, grades, distances between water accumulation points, arrangement of piping and type of boiler. From these data would make a layout, showing where and how he would place the traps, size of delivery pipes, disposal of condensation to best advantage, and approximate cost of installation. He would leave no room for guesswork, and he would answer all questions before they were put.

He would thus secure first a more willing and consequently a more receptive listener; the impression made would be more lasting, and obviously the possibilities of a sale greatly augmented. The great variety of conditions which present themselves in this field alone offer to the studious-minded seller or advertiser—for the two are synonymous—a fertile field for profitable and highly absorbing investigation.

COMPARATIVE VALUES OF DIAGRAMS AND OTHER METHODS OF ILLUSTRATION.

The printed matter, such as pamphlets, booklets and the like, cannot be too comprehensive. Illustrations of actual installations should be given, and these views should be for reference, marked with clear explanations in the text matter. The seller should bear in mind at all times that what is clear as day to him may be dense as mud to the other fellow, whose mind is busy on other matters, and who has spent possibly a week or ten days

* Late Advertising Manager of A. A. Griffing Iron Co.

looking into the merits of the seller's device, while he (the seller) is devoting all his time to its exploitation.

Diagrams and plan views will appeal to engineers, as a rule, more readily than half-tones or wood-cuts. Men who are trained to read a mechanical drawing will instinctively stop to look at good draughtsmanship. Therefore, the diagrammatic representations should be skillfully rendered, lines clean cut, shadings properly looked after, angles neatly joined—in a word, they should be as nearly perfect as they can be made.

A mere picture of a machine is not always educational. There should be reference figures and an explanation of the relationship that exists between parts. Better still—let the machine be represented in practical working application. Ofttimes the prospective buyer will be enabled to frame in his own mind a conception of the utility of the device as applied to his plant. The successful seller must always have before him the knowledge that the buyer's interests are paramount, and that the closer he can weave the warp of his proposition with the woof of the buyer's wants, the greater becomes his chances of success.

In selling devices of the character named, I would dwell less upon the details of construction and more on the applicability to given conditions. The trade paper advertisements should be replete with meaty information as to varied methods of utility and wherever unusual or knotty problems have been solved, a clear description should be given, accompanied by diagrams; these are always more interesting to the reader than glittering generalities. Quote representative installations, not by name only, but give the facts. Don't be afraid to speak out for fear a competitor will catch some new wrinkle. If he does get it, he will be second in the field, and to that extent handicapped, whilst you have the lead and have only to keep it. Bear in mind what your competitor reads another possible customer reads also, and that is the melon you are after.

HOW INQUIRIES DWINDLED AND DISAPPEARED WHEN ADVERTISING WAS DISCONTINUED.

My judgment relative to the use of advertising space in trade papers is, be liberal. The keep-it-down-to-a-quarter page policy is by far the most expensive in the long run, as I have just warrant to assert from personal experience. No breach of confidence or business etiquette will be violated if I quote here a few facts in regard to the effect of ceasing trade paper advertising by the old, well-established and thoroughly reputable A. A. Griffing Iron Co., well known from the Atlantic to the Pacific. For a number of years I had charge of the publicity department for that company, and made careful note of the results of some types of advertising while it was yet aggressive. When it ceased altogether to advertise, which was about eighteen months previous to the time it passed into the receiver's hands, I instituted a check system, whereby I could note the falling away of inquiries. During the first three months there was no appreciable difference; by the end of six months the inquiries had dropped off about 50 per cent.; at the end of nine months this was increased to approximately 75 per cent., and by the end of a year they had virtually ceased, so far as new names were concerned. Now, here was a house whose product had enjoyed most liberal advertising during a considerable term of years, and one would quite naturally assert, with some degree of justification, too, that they could not so effectually drop out of existence in a period equal to about one and a half years; that practically no new names would be coming in through the mails. Yet, that is precisely what happened. I merely quote the above facts as prima facie evidence of

the unquestioned value of an aggressive and perpetual campaign of advertising on the part of any manufacturer who would woo and win continued success. No matter how well he may think he is established, or how thoroughly his product is known, if he steps out of the limelight for even a short time he will feel the results in reduced sales.

THE KIND OF "COPY" THAT REACHED THE RIGHT MAN.

I obtained the best results in advertising the steam specialties of the company named when carrying full page space in the leading trade papers and running the advertisements in three column form, straight, solid reading matter, set up in small type, say, 7-point, with a standing caption across the top of the page. Perhaps some of my readers will recall the "Bundy Bulletin." Each month I made a point to publish interesting news matter, of course, detailing something that had transpired in connection with the company and its product, but absolutely no effort at so-called display advertising. Cuts used were not over two columns wide, generally but one, and were always of the goods, nothing in the shape of funny pictures, cartoons or like type of presentation. I noticed at once an appreciable increase in inquiries, and also a change in their character, by which I mean the letters received were from a higher grade of men—superintendents, chief engineers and owners or general managers of large establishments. I recognize that this remark might be seized upon by the trade paper circulation manager as typifying the high quality of his clientele, which is all right. But it is one thing to cater in an advertisement to the curious-minded or free premium collector, and quite another to conduct a campaign that will bring down the real game, i.e., the man behind the check book. Therefore, I repeat, it does not pay to spend money so much on adjectival phrases that anyone can use, as in the telling of a real interesting, instructive story, based upon performance, and not upon imagination.

Prizes Paid for Suggestions

Every manufacturer is on the outlook for suggestions. Every employer has a chance of getting innumerable valuable suggestions from employees—the ones who are in the best position very often to give suggestions. But this opportunity is not taken advantage of as much as it might be. In an editorial in this issue attention is called to the results obtained from a system of offering prizes to employees for suggestions inaugurated by the Yale & Towne Mfg. Co.

The results of the first half year of this system thoroughly convinced the company of the value of the scheme. By turning to the Editorial page in this issue a record of these results can be seen.

The system adopted by this firm was as follows as explained in a circular issued by the company to the employees:

PRIZES FOR SUGGESTIONS.

The company desires to encourage its employees to co-operate with the management to secure improvement in its products and in all branches of its business, and to this end has adopted a plan whereby employees may have an incentive to make suggestions with the assurance that all such suggestions will have careful and impartial consideration. Should such suggestions prove of value the suggester will thereby qualify to compete for a series of prizes to be awarded semi-annually to employees offering the best suggestions.

Suggestions are invited from all classes of employees. No suggestion need be held back because it appear to be of little importance. The simplest ideas are often valuable.

Suggestions lead to promotion and increased value. They show an interest in our work and organization, and a capacity for greater responsibilities. We invite suggestions upon mechanical improvements of product or equipment, methods which will facilitate prompt shipment of orders, improvement in factory systems, decreased cost of manufacture and other matters calculated to advance the interests of the company.

RULES GOVERNING SUGGESTIONS.

1. The officers of the company, superintendents, assistant superintendents, draftsmen and experimental men, and employees of corresponding rank, are not entitled to compete for any prize.

2. The suggestion Bureau will be under the supervision of a committee of three employees, who, by virtue of their position in the management, are disqualified for competition for prizes.

3. Suitable boxes have been placed throughout the works and blank cards provided on which employees may record their suggestions. Write your suggestion upon the card provided and place it in the box. Cards will be collected weekly.

4. Suggestions will be considered by the committee and, whether accepted or rejected, will be acknowledged by its secretary, in order that the employee may be advised as to the disposition of his suggestion. For each suggestion accepted, whether it relates to an improvement or modifies instructions which the author of the suggestion has no authority to change, the company will award the suggester the sum of \$1, the same to be paid by the paymaster upon presentation of an order which will be sent to the employee when he is notified that his suggestion has been accepted. The company will then be at liberty to adopt the suggestion at any time at its option. Orders for suggestions may be cashed any working day between 12 and 12.15 p.m.

5. The name of the suggester will be treated as strictly confidential, and will not be revealed without his consent until the awards have been made, as hereinafter provided.

6. No time, materials or other property of the company shall be used in developing any suggestions without the consent of an official of the company.

PRIZES.

The company will award semi-annually the sum of \$600 for the most valuable suggestions received during the previous six months. This amount will be divided between two competitive groups, as follows:

GENERAL COMPETITION.

(Six Awards, Amounting to \$150.)

Open only to salaried employees, foremen and contractors.	
First prize.....	\$50.00
Second prize.....	40.00
Two prizes, \$20 each.....	40.00
Two prizes, \$10 each.....	20.00
Total.....	\$150.00

WORKMEN'S COMPETITION.

(29 Prizes, Amounting to \$450.)

Open to all employees not included in the "General Competition."	
First prize.....	\$50.00
Second prize.....	40.00
Five prizes, \$20 each.....	100.00
Eight prizes, \$15 each.....	120.00
Fourteen prizes, \$10 each.....	140.00
Total.....	\$450.00

METHOD OF AWARDING PRIZES.

On the 15th of January and July of each year employees who have made suggestions of the greatest value during the six months preceding the 1st of January and the 1st of July will be awarded prizes in their respective groups in the order of the importance of the suggestion.

As soon as the awards are made the prizes will be paid in cash and notices will be posted giving the names of the prize winners, together with a brief description of their suggestions.

Unique Profit and Loss Sharing Plan

A manufacturing company in Bridgeport, Conn., conducting its business on a profit-sharing plan, has used a unique form of contract for six years.

The significant features of their profit-sharing contract are as follows:

(1). Employer and employee agree to share *both* profits and losses.

(2). Net gain or loss is ascertained by deducting from the gross result of the inventory on the first of February all expenses for the year previous of every kind, including depreciation of buildings, tools, machinery, and bad debts. In the case of gain, the capital invested, as shown by the inventory, shall first draw 6 per cent. interest, "or, in case there is less than that amount, shall draw what there is, in liquidation of its claim"; the balance, then remaining, to be divided between the company and the individual employee in the proportion which the capital invested bears to his total wages for the year.

(3). For each current year, one-tenth of the wages of every employee, who is a party to the contract, is withheld each week. In case there is not a net loss on the entire business of the year, this reserved money, together with any accrued profit, as figured above, is paid to the employee, on or before March 1, of each succeeding year.

(4). In case of a net loss on the business of the entire year, without figuring any dividend as above provided for capital, this loss is divided between the company and the employee in the same method as that prescribed for the dividing of profit; but in no case does the employee become responsible for losses greater than the amount reserved from his wages.

(5). Other employees may become parties to this contract upon the invitation of the company. Any employee may withdraw from the contract at any time, and from the firm's employ, but the company then holds the right to retain the 10 per cent. reserve till the end of the current year. In case it is so held, its owner shares in the company's profit or losses.

(6). The firm may discharge any of its employees, but in that case he shall have the option of withdrawing his full reserve, or of leaving it till the end of the year, to share in profits and losses.

(7). It is agreed by the company that none of its employees, who signs this contract, shall be temporarily retired from work so long as the company has any work of the kind he is accustomed to do; but if there is a shortage of work in the hands of the company it shall reduce the hours of work, and so divide the work among its employees. If at any time an employee becomes sick or incapacitated to perform his duties, and has a certificate of a reputable physician that he is so incapacitated, he may draw on his reserve wages at a rate not greater than six dollars a week, without affecting his interests in the profits at the end of the year.

System for Filing Technical Literature

A System Chosen by the Writer After Experimenting for Several Years with Different Systems. A Comprehensive Card-Index System. A Cabinet Provided with Filing Drawers for Clippings; Storage Space for Periodicals

BY OSCAR E. PERRIGO, M.E.

Every man must have at hand the proper tools for his work. Every mechanical, professional or technical man must not only possess, but use, the tools suitable for his particular profession or trade. To the mechanic this means not only the machines at which he works, but the hand tools with which he works. To the professional or

and the modern mechanical journal has one other great advantage over most books. Its subject matter is the work of many minds, and therefore gives us a far more comprehensive view of mechanical and technical matters than would be possible if it were written by a few writers even though they are specially trained for such duties.

However, we find that with the many excellent periodicals of this nature they are very liable to accumulate rapidly on our hands, and soon we have great piles of them, all containing valuable information, but buried in such a mass that what we want at the moment cannot be found. True, we may keep a detailed index of all this matter that we shall be likely to need in the future, but this would avail but little as a labor-saving scheme, since the handling of the hundreds of magazines and papers would involve so much time as to greatly curtail the value of the information sought.

The solution then would seem to be that of clipping out all the articles we should probably need in our particular line of work and arranging them in some convenient manner, so as to be quickly found by means of a suitable index.

For several years the writer had experimented with one system or another without much success. The old-time scrap book proved inadequate in a short time from very obvious reasons, and was discarded. Folders soon went the same way.

The method of pasting articles on cards of a uniform size and filing these in card board cases, made to resemble books, and having on the back the title of the subject matter contained in each, was a great improvement. But obsolete matter was not

this soon proved cumbersome and inconvenient, and the article desired was not readily found even with the aid of a good index. The envelopes were kept in boxes in which they were filed vertically for as ready access as possible. But this arrangement, while an improvement on the previous methods, did not satisfactorily solve the problem, even with a card index. The contents of an envelope, after it had been found, usually had to be emptied out on a table and the clippings sorted to find the article sought, after which the remaining contents had to be replaced in the envelope and the envelope put back into the box in its proper place.

About two years ago the writer constructed a filing case containing drawers for each subject of the lot of clippings. This case contained thirty drawers 4 inches wide, 3 inches deep and 12 inches long, inside measurements, and four drawers double the width but of the same depth and length. The successful use of this case led to the idea of enlarging its scope and usefulness, which was done in the cabinet shown in Fig. 1.

This cabinet consists of several sections, the lower one being a cupboard with double doors and used for two purposes, first to bring the upper sections up to a convenient height for use, and, second, to furnish a convenient storage space for periodicals from which articles are to be clipped, and for clippings not yet classified and filed.

Above this are two sections, each composed of six drawers, one of which is shown in Fig. 2. These are divided into five compartments each, the spaces being 4 1/2 inches wide, 13 1/2 inches long and 1 1/2 inches deep, and sufficient to hold a column of matter

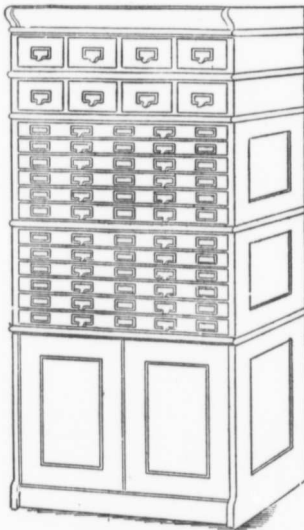


Fig. The Filing Case.

technical man it means his books, his magazines, his technical reports, and by no means least in importance and practical usefulness, his file of clippings and similar data which he gathers day by day from whatever source he may, and in these present days of sharp competition of brain work as well as the labor of hands, the wise man will make use of all these agencies in becoming the broad-minded man of practice as well as theory and thereby lay the foundation of success, however much stress we may lay upon the specialization of men as well as machines, of the working of brains as well as hands.

Books give us in a convenient and portable form much of the information which we need from day to day, and to which we must frequently refer. There is a vast amount of this information which does not change or need revision from year to year, and permanently bound volumes are the proper receptacle for preserving it. But in a general way they do not contain recent, and certainly not the latest information upon the live, every-day topics, the information that is fresh and up-to-date. For this we must look to the mechanical and technical periodicals. We find these of excellent quality and full of the much needed, practical information,

BEVEL GEAR Calculations	
By J. R. Wright	Jan. 1908
Also	
Impact Tests of Wrought Steel	(Cont.)

FIG. 3 AN INDEX CARD

IRON, Malleable Castings.	
Jan. 1908, the Franklin Institute gave	
a Premium to Stephen Borden	
of Newark, N.J. for making	
Malleable Iron Castings.	

Fig. 5—A Data Card.

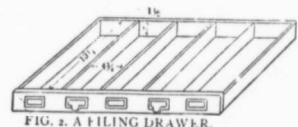


FIG. 2. A FILING DRAWER.

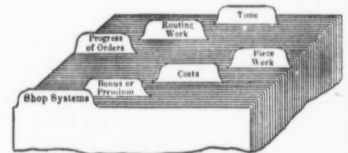


Fig. 4—Subject and Class Guide Cards.

Details of System.

readily eliminated, and the cases were soon too full for convenient accessibility. More cases could, of course, be provided, but this soon rendered the whole method unwieldy and complex.

The envelope method came next, but

from those periodicals using the wide column, or a full page of either of these or the three narrow column page of others when they are folded once. A separate label holder on the front of the drawer opposite each compartment shows its contents.

Above these are two half sections each containing four drawers for regular 3x5 inch filing or indexing cards.

These sections may be purchased, ready for use, except that the division in the filing drawers must be supplied. Therefore the system may be commenced upon a moderate scale if desired and expanded at any time and to any extent.

The system for handling clippings of over a quarter of a column in length is as follows: Each compartment in the filing drawers is devoted to a subject or a class of the subject. Index cards are filled out for each article filed, as shown by the index card in Fig. 3, giving on the top line in plain letters the title under which the article is filed, and following this with sub-title or any further information or explanation of its nature that may be necessary. Then follows the author's name and the date on which the article was published. The clipping is then filed in the proper compartment in the filing drawers.

Should there be another desirable article printed on the same clipping, say, for instance, on the back of it, its title is given preceded by the word "also," to indicate that fact. In this case another card is filled out giving the proper title, etc., and beneath is the word "with," after which follows the title on the original card, for the purpose of indicating where the second article may be found. In the same manner a third or fourth article may be indexed.

The method of arranging the guide cards in the index drawers is shown in Fig. 4. The first, or subject index card is blue and gives the subject, in this case "Shop Systems." Then follow the class guide cards, salmon color, with the different classes of the subject, as "Bonus or Premium," "Costs," etc. The labels on the fronts of the filing drawers are lettered the same as these guide cards and the subjects arranged alphabetically, the class labels being of a different color. When the subject is not divided into classes one compartment is sufficient to hold the clippings relating to it. If the subject is divided into classes there is a separate compartment for each.

In the illustration, Fig. 1, are shown drawers containing sixty compartments. To properly index the matter contained in these will require two and possibly three index-card drawers. Short clippings are pasted on the 3x5 inch index cards, using both the front and the back if necessary. The proper heading is written similarly to that on the index cards.

Again, there are many items of information, formulas, memoranda and the like that can be very conveniently written on one or both sides of a 3x5 inch card, as shown in Fig. 5. These cards, together with those bearings pasted clippings, are filed together in the remaining index-card drawers, and it will be somewhat surprising how rapidly they will fill up and what a variety of useful information can thereby be stored away for future use. They may be filed alphabetically if desired, but for quick and convenient reference it will be better to file them by subjects and classes, the same as the longer articles, and similar guide cards should be used, as one soon becomes accustomed to the classification and knows just where to look for what is wanted.

In arranging a classification of subjects,

they must, of course, to a considerable extent, be handled with reference to one's individual needs. Frequently, the verb rather than the noun may be used to advantage for the initial word. Both are used as occasion require in the following list of subjects which the writer has adopted for present use, but which will doubtless be changed from time to time as circumstances may dictate.

Air. Alloys. Automobiles. Biography. Bolts, Nuts and Screws. Books and Periodicals. Brazing and Soldering. Building. Drawing. Drilling and Boring. Electroplating and Galvanizing. Electricity. Engineering. Filing Systems. Fire Protection. Forging. Foundry. Gas. Gasoline and Oil Engines. Gearing. Grinding. Iron. Lighting. Heating and Ventilating. Lubrication. Materials of Construction. Manufacturing Plants. Milling. Oils. Painting. Patterns. Piping. Planing. Punching and Shearing. Power. Rolling Mill Work. Sanitation. Sawing Metals. Schools, Technical. Shop Management. Shop Systems. Small Tools. Speeds and Feeds. Store Room Steel. Supplies. Tool Making. Transportation. Turning. Turret work. Variable Speed Mechanisms. Water. Wood Working. Miscellaneous.

These various subjects, being divided into classes when necessary, will give very full

and complete means of reference. There is more danger of having too large a number of clippings in a class than in having too many classes, as a large class will make quick reference more difficult. Classes can at any time be readily increased by adding another section of filing drawers. Those sold for holding legal blanks or electrotypes will be proper for this purpose.

The index cards may also be used as an index to certain matters in reference or text books that are likely to be wanted in the future by filling out a separate card for each article or item of data required and adopting as a headline whatever initial word the user would most likely call to mind in looking it up, that it may be quickly and conveniently referred to. Cross references may be made in case the title of an article seems to make it necessary, but it will be better to avoid this as much as possible as it is very easy to make not only much extra labor, but a cumbersome index.

Obsolete matter should be removed from the filing drawers and index drawers as soon as its usefulness is past, so as not to encumber the filing case with it.

When the clippings relating to a subject become too numerous for the space set apart for it, it should be divided into two or more classes.—American Machinist.

Card Ledger for Manufacturers

With the Card Ledger One Firm Look After 40,000 Accounts with But One Bookkeeper. Some of Its Advantages Brought Out.

By H. A. L'ENGLE*

It seems such a simple thing to understand that many men never give sufficient thought to the Card Ledger to really know its use. To keep accounts on cards! The idea is seemingly too preposterous for some men to care to learn any more about it.

Yet this same simple idea of keeping accounts on cards instead of in books or in binders is to-day revolutionizing accounting methods.

The Gorham Mfg. Co., Providence, R.I., have forty thousand accounts and have but one bookkeeper. He makes all postings to the cards both debit and credit entries. He is aided in his work by three dollar per week boys. Statements are always out on time and their trial balance is quickly taken. This concern has saved thousands of dollars each year from the use of its card ledger and there are hundreds of others doing the same thing in England, Canada and the United States.

When such startling figures as these can be shown it is readily seen that a discussion of the Card Ledger is a live subject to manufacturers and their accountants.

Is it safe? Isn't it gross carelessness to keep such important records as customers accounts on cards? These questions occur to some—and naturally too. One looks askance at seemingly loose methods which are new and little understood.

Everything is relative in this world. We judge by comparison. Let us, therefore, compare the looseness of the Card Ledger

with the method of keeping the two things that are recorded on the ledger—goods and money.

Goods—represented by material or finished product—are handled by various people in a factory and can be taken from bins or shelves often without even an accurate record being kept of amounts taken. Some manufacturers never know until the end of the year whether there has been a leak in their business on account of not having their material nailed or locked up.

A trial balance is taken of ledger accounts once every month and a card ledger alone of any ledger makes it possible to take a daily proof of postings.

We all know that money is not sewed up in books. Each five or ten dollar bill is loose and yet the money we lose on account of bills not being sewed up into books does not bother us much.

When conservative savings banks use card ledgers as they are doing to-day by the hundreds it seems hardly necessary to argue as to the safeness of cards for ledger purposes.

Where there are over one thousand accounts in a business the saving of time in posting to the ledger, in making out of statements, in taking off of trial balances, and in following up of delinquent accounts is easily apparent from the use of a Card Ledger.

The accounts to be handled are kept down to the active ones; they are all in view at a time and the folio number can be seen on every card no matter how many there may

* Associate Manager, Library Bureau of Canada, Limited.

be, without turning a card or touching one of them.

A card can be found and posted before an account can be found in most other ledgers. By the use of signals delinquent amounts are always staring one in the face.

The ordinary ledger card provides space for eighty entries which is equal to two pages

of an ordinary bound or loose leaf ledger. It is just as easy to write on the bottom line as on the top line for the card lies flat on the desk.

The number of card ledger users increases every day. It is only a question of time when their use will be universal, so some of the card ledger users tell me.

shortage. If the supply of a certain circular or discount sheet, say, runs short all that is required is to put "electrotype No. —" in the machine, and run off the copies wanted.

"Writerpress" letters are produced by means of a marked ribbon, which automatically moves across the surfaces of the type form, the intensity of shade being regulated by a slight adjustment of impression roller.

The fac-simile letter work ribbons are furnished for the regular typewriting machines used in the office that exactly match the color and shade of the ribbon supplied with the machine.

Typewriting 2,000 Letters an Hour

A Description of the "Writerpress," Its Work and its Operation. Use of Electrotypes in the Machine.

In many business concerns it is frequently desired to send out to a list of customers, or agents, or prospective buyers a typewritten letter, the same letter being sent to each customer.

To meet such needs several duplicating



Method of Operating the Writerpress.

machines have in the last year or two been placed on the market. One of these is the "Writerpress," sold in Canada by the Canadian Writerpress Co., Limited, Hamilton.

This machine consists of a flat type-bed, upon which metal type are arranged for printing; a moving, rubber covered impression roller; metal type similar in size, shape and hardness to the type-face on any style of typewriter and a type chase for holding the type. As will be seen from the accompanying views it is simple in construction and will withstand rough usage. All parts are interchangeable so that breakages resulting from accident can be readily repaired.

The method of operating the "Writerpress" is such that a clerk of ordinary intelligence can quickly become an expert.

The types are taken from a type case the compartments of which are arranged in the same order as the keyboard of an ordinary typewriter, and set into the type

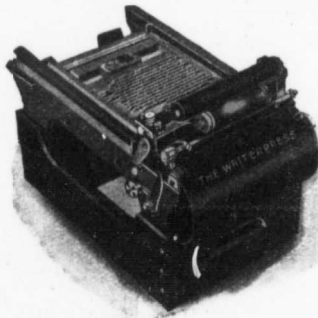
frame. The frame or chase containing the type form is then placed in the machine and is ready for operation.

The paper is then fed one sheet at a time against the paper guide, and the rubber-covered roller, passing over, produces the desired impression, the return automatically ejecting the printed sheets. The force of the impression and the shade of color may be regulated instantly by means of impression screws, at the will of the operator. Errors are corrected readily by removing the wrong characters, substituting the correct ones, and again tightening the key, the type form not being removed from the machine. This operation is simple. It is also entirely mechanical, and requires no special skill.

A numbering machine may be put into a form which automatically numbers order forms, invoices, etc., in duplicate or triplicate.

In addition to typewriter type, of which there are a great many different styles, any printers' job type can be used, to suit the fancy of the individual. Thus, if a big display line is desired in the heading or in the body of a circular letter, it can be inserted as easily as the ordinary type. In the same manner a cut, or engraving of any desired object, can be placed anywhere in the type form, and the entire circular printed, with the cut and any style of type, at one operation.

Electrotypes of any form can be made to order at any electrotype foundry, at a small cost, thus holding the form indefinitely for future use when some additional copies of that particular circular or form letter may be required. In such cases, the electrotype is simply placed in the machine, made fast, and the sheets of paper fed in as before. Stationery, as well as time, is saved by this means, because there need be no "extra copies" made to provide against



Ribbon Lifted Showing Type Chase and Paper Gauge.

A Simple Charging System

The following is a description of a very simple and complete charging system in use by a large retail and manufacturing stationery concern in Montreal.

When an order is taken, the salesman makes out an invoice on an Egry Autograph Register. In doing so he makes two carbon copies. One of the carbon copies is a complete duplicate of the invoice, and it is filed for reference. The other carbon copy is in the form of a receipt for the delivery of goods. This ruling is made in such form that the prices may be torn off of the goods receipt, as many purchasing agents dislike to have the prices of everything they buy in the hands of anyone in the office who may happen to sign for the goods.

If the order requires any factory work, a factory number is entered, which, of course, is duplicated on the other slips, and the carbon duplicate of the invoice is used as a factory order slip. It is fitted in a binder when the order is completed and the invoice sent.

This system always provides a receipt form for the delivery of any goods ordered, and as these goods receipts are carefully fitted, they are at hand for reference, whenever a complaint about delivery or non-delivery of any order is received.

When the invoice duplicate is filed the total is entered in a monthly statement book where a carbon duplicate is also made. At the end of each month the statement is totalled up, torn off and sent to the customer, a duplicate remaining in the binder.

In case any item on the monthly statement is called in question, every detail connected with the transaction—the copy of the original invoice, and the receipt for delivery of goods, can be referred to at once and the account verified.

The monthly totals of each account and the payments are entered in a loose leaf ledger, when they are cared for in the usual way.

To Sell the Polygraph in Canada

Mr. Fred. W. Tenney, 116 Stair Bldg., Toronto, has accepted the Canadian sales agency of the "Polygraph," one of the latest and simplest of the typewriter duplicating machines, made by The N. Waldro Harrison Co., 52 William St., New York.

A feature of the proposition made by Mr. Tenney is that each machine is guaranteed, and if found not as represented or unsatisfactory, may be returned and money will be refunded.

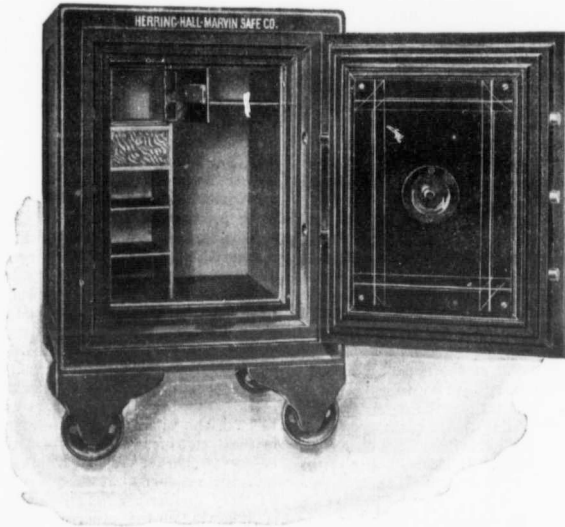
A detailed description of the machine will be given in a later issue of this edition of THE CANADIAN MANUFACTURER.

Protection for Funds and Documents

The recent epidemic of disastrous fires and unprecedented number of burglaries of late in the Dominion, forcibly demonstrates the positive lack of protection now

protection entailed and our business men owe it to themselves and their business, present and future, to immediately investigate the strength of their protection. It is well to remember that a poor safe is worse than no safe at all, for it will misuse your trust and will not stand the test in time of need. If

This company are prepared to submit plans and specifications covering installations for new buildings, either for an ordinary safe or for the most intricate fire and burglar proof for vaults.



The Herring-Hall-Marvin Safe.

existing in the majority of business houses and manufacturing firms, in Canada.

This amazing condition, caused by the evident absence of both fire and burglar proof safes illustrates the need of a line of first class safes which can be sold at a reasonable price.

In the recent great Three Rivers fire, the contents of approximately 80 per cent of the safes and the safes themselves were destroyed. One can readily understand the enormous loss that this lack of fire proof

you are buying for fire or burglary protection it should not be a question of how cheaply you can buy, but how well you can guard against loss.

The Herring-Hall-Marvin safes, sold by the Canadian Fairbanks Co., embody twenty-two characteristic features which make strong convincing reasons for their worth. A complete line of these safes is carried at the different warerooms of the Canadian Fairbanks Co., at Montreal, St. John, Toronto, Winnipeg, Calgary and Vancouver.

For Saving Space in the Office

Many manufacturers and merchants find it a difficult matter to file letters, records, etc., and to keep books, catalogues, in small compass yet free from the dust and dirt which so readily accumulates when such articles are left exposed.

In the accompanying views of specimen filing systems excellent methods of saving space and at the same time properly caring for records, files, catalogues, etc., are shown.

Fig. 1 illustrates an Office Specialty Mfg. Co. vertical letter filing system, with above it a "Y. and E." glass door storage section for storing catalogues, desk books, etc., frequently referred to, while to the right is a "Y. and E." letter copier.

Fig. 2 is a more comprehensive system for a smaller office. The top division of the section to the right is used to store electros; below these is the card index to correspondence; below this are two vertical filing sections, with one door open, for storing stationery. To the top of the left section are card indices for quotations given and quotations received; below this is a section devoted to factory reports; then two vertical letter filing sections and at the bottom another section for stationery storage.

In almost every case each concern needs a different system to other houses, so it is well in arranging for the installation of such a system to get the advice of experts of this class of work such as the salesmen of the firm whose systems are illustrated above.

COMPANIES INCORPORATED.

Ontario.

TORONTO.—The Colonial Wall Paper Co., Limited, have been incorporated with a capital of \$99,000. The provisional directors include F. W. Thorold, H. L. Watts and M. R. Wadds, all of Toronto.



Fig. 1.

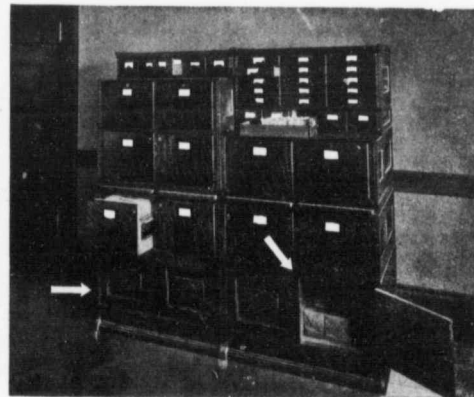


Fig. 2.

CAPTAINS OF INDUSTRY

Opportunities for Business. News of Building or Enlargement of Factories, Mills, Power Plants, Etc.—News of Railway and Bridge Construction—News of Municipal Undertakings—Mining News.

BUILDING NEWS.

Ontario.

TORONTO.—Mr. Lawrence Solman will shortly erect an eight story hotel to cost \$150,000.

NORTH TORONTO.—Plans have been accepted from Architect Langley for enlarging the Davisville and Eglinton schools.

FORT WILLIAM.—Mr. W. J. Ross intends to build a large warehouse here. The building will be four story and a basement.

WOODSTOCK.—Grafton & Co. will enlarge their premises by an additional story.

MAGNETAWAN.—A large flour and feed mill will be erected here by John Schadie.

WALKERVILLE.—A new post office will be erected here.

LISTOWEL.—The factory of the Morris Piano Co. have been completely destroyed by fire. The estimated loss is \$75,000.

NORTH BAY.—Fire broke out in the sheds at the rear of the Atlantic Hotel, which destroyed the hotel and two valuable residences. The loss is estimated at \$25,000.

LONDON.—A public school building will be erected here in connection with the Normal School.

WELLAND.—The Michigan Central Railway will erect a new station here.

Quebec.

QUEBEC.—The Victoria Club will enlarge their rink.

MONTREAL.—The Canadian Spool Cotton Co.'s works will erect an office building and turning shop.

MONTREAL.—The Outremont round-house on the Canadian Pacific Railway has been destroyed by fire. The damage amounts to \$20,000.

Manitoba.

WINNIPEG.—The Argyle Land Co. will erect a large four story basement building on Notre Dame Avenue, at a cost of \$35,000.

MORDEN.—A new skating rink will be erected here at a cost of \$1,200.

WINNIPEG.—The Bank of Montreal have purchased the Canada Permanent block and will erect a structure to cost half a million dollars.

SHOAL LAKE.—A. S. Arnold is erecting a 30,000 bushel elevator.

British Columbia.

FERNIE.—Plans are being prepared for a structure to replace the bridge over the Elk river, which was recently destroyed by fire.

TYNEHEAD.—A new school building will be erected here.

FAIRVIEW.—A new post office will be erected here, estimated cost, \$15,000.

Nova Scotia.

DOMINION.—A new town hall will be erected here.

KENTVILLE.—A large building will be established to manufacture marine gasoline engines.

SUSSEX.—The Universal Spring Co. intend enlarging their plant by the erection of a three story factory building.

Newfoundland.

HARBOR GRACE.—A branch of the Bank of Nova Scotia will be erected here.

Saskatchewan.

SUTHERLAND.—The Canadian Pacific Railway will erect a new station here.

New Brunswick.

MONCTON.—An isolation hospital will be erected here.

TOBIQUE.—A new school building will be erected here.

SASKATOON.—The Rideau Stone & Plow Co., of Smith Falls, Ont., will build a distributing warehouse at this town.

MINING AND CONTRACTING NEWS.

Ontario.

DUNDAS.—The Northern Electric & Mfg. Co., Limited, Montreal, have been awarded the contract for the fire alarm system here.

Saskatchewan.

SASKATOON.—The contract for the construction of a public building here has been let to Dion & Simoneau, of Cookshire, Que. Cost to be \$13,300.

BRIDGES AND STRUCTURAL STEEL.

Ontario.

HAMILTON.—A new cement bridge will be erected at Wolfe Creek.

Alberta.

LETHBRIDGE.—The Canadian Pacific Railway have let the contract for the construction of a bridge over the Old Man river to Thomas Kelly & Sons, at an estimated cost of \$300,000.

WATERWORKS, SEWERS, SIDEWALKS.

Alberta.

CALGARY.—A by-law has been passed authorizing the installation of additional sewers here.

Saskatchewan.

LUMSDEN.—A new waterworks system will be installed here.

FACTORY AND MILL EQUIPMENT.

Ontario.

TORONTO.—The Standard Sanitary Mfg. Co., Pittsburg, Pa., are looking for a site for a Canadian plant. Both Toronto and Montreal are after it, but as yet nothing definite has been decided.

ST. THOMAS.—The Pere Marquette Railway will erect repair shops accommodating fifty locomotives.

Quebec.

SHERBROOKE.—The E. & T. Fairbanks Co. Scale Works are placing the machinery in their building and expect to be operating soon.

Nova Scotia.

KENTVILLE.—A manufactory for the building of marine gasoline engines will be established shortly.

MISCELLANEOUS NEWS.

Ontario.

WESTBORO.—The Barrie hotel has been completely destroyed by fire.

BRADFORD.—John Hill carriage works has been completely destroyed by fire.

Quebec.

MILE END.—The Canadian Pacific Railway round house was recently destroyed by fire loss, \$20,000.

British Columbia.

CRANBROOK.—A telephone company has been formed here called the Kootenay Telephones, Limited, which will be capitalized at \$200,000. They have purchased the Cranbrook Telephone Co.'s system and will operate near here.

SAW MILL AND PLANING MILL NEWS.

Ontario.

BEACHBURG.—Mr. J. Johnston's saw mill and contents were completely destroyed by fire. A large quantity of lumber and shingles were also destroyed. The estimated loss is \$2,000.

TRADE NOTES.

Ontario.

INGERSOLL.—The Ingersoll Nut Co. has purchased the Canada Nut & Bolt Co., Niagara Falls, and will remove the entire stock to Ingersoll.

TORONTO.—Mr. J. Scott Innes, manager of the Canadian branch of the American Multigraph Sales Co., Cleveland and Toronto, reports a material improvement in the demand for the Gammeter multigraph. Business was quiet during the summer, said Mr. Innes, but during the past few weeks there has been a most satisfactory increase of enquiries and of sales.

A. C. Neff & Co., chartered accountants has removed from 26 Wellington Street East, to Dominion Building, 70 Victoria Street.

Death & Watson, electrical engineers and contractors, Toronto, have just completed the contract of equipping the Wesley Methodist church with Nernst lamps.

HAMILTON.—The Berlin Machine Works, Limited, Hamilton, are having their new plant equipped with sprinkler system by the Standard Automatic Fire Sprinkler Co., Limited, Montreal.

Quebec.

QUEBEC.—The Dominion Corset Co., Quebec, are having a sprinkler system installed by the Standard Automatic Fire Sprinkler Co., Limited, of Montreal.

ST. THERESE.—The new factory of the Dominion Furniture Co., at St. Therese, Que., is being equipped with sprinkler system by the Standard Automatic Fire Sprinkler Co., Limited, of Montreal.

MONTREAL.—The Standard Automatic Fire Sprinkler Co., Limited, Montreal, are making the following installations of sprinkler systems in Montreal: entire plant of the Laing Packing & Provision Co.; new factory of the Canadian Spool Cotton Co., Riverside Park; new building for Lyman Sons & Co., St. Paul Street; warehouse of Victor Beaudry Estate on St. Devin's Street; and an extension of the plant of the Canadian Rubber Co., Limited.

MONTREAL.—The Dominion Tag Label & Ticket Co., Limited, are moving into larger premises at 10 St. Peter Street, where they will manufacture in addition to their former lines, a line of high grade folding boxes.

MONTREAL.—The Dominion Iron & Steel Co., Montreal, have received an order for 9,000 tons of 80-lb. rails for an Indian Railway.

COMPANIES INCORPORATED.

Ontario.

TORONTO.—The Holmes Safety Blasting Compound Co. have been incorporated with a capital of \$200,000 to manufacture explosives. The provisional directors include J. E. Holmes, R. Cain, W. J. Hodgins, Haliburton, Ont.

HAMILTON.—The Aeme Stamping & Tool Works, have been incorporated with a capital of \$40,000 to manufacture and sell hardware machines and tools. The provisional directors include E. P. Bowman, J. H. Barnard and D'A. Quick, all of Hamilton.

OTTAWA.—The Fleming Grate Bar Co. have been incorporated with a capital of \$40,000, to manufacture furnaces, boilers and machinery. The provisional directors include H. W. Chamberlain, J. R. Gardner and J. B. Fraser, all of Ottawa.

OTTAWA.—The Henry J. Sims Co., Limited, have been incorporated with a capital of \$49,900 to take over the business of Henry J. Sims & Co. The provisional directors include A. Normandin, Oscar Normandin and A. P. Grenier, of Montreal.

STRATFORD.—The Corrugated Pipe Co. have been incorporated with a capital of \$25,000 to make corrugated pipe. The provisional directors include W. Dawson, W. H. Burgess and T. J. Moore, Sandusky, Mich.

NIAGARA FALLS.—The American Electric Furnace Co. have been incorporated with a capital of \$50,000 to manufacture and deal in electric and other furnaces. Provisional directors include T. Rowlands, W. H. McGuire and A. J. Johnston, Niagara Falls.

TORONTO.—The Sanitary Heating Co. have been incorporated with a capital of \$300,000 to carry on an iron foundry business. The provisional directors include A. D. Watson, M. J. O'Keefe and J. W. Gerell, Toronto.

Quebec.

MONTREAL.—The Canadian Felts, Limited, have been incorporated with a capital of \$1,000,000 to manufacture felt and knitted goods. The provisional directors include E. F. Surveyer, A. C. Casgrain and J. W. Weldon, Montreal.

The Castell Drawing Pencil

While an individual lead pencil is small the lead pencil industry is one of the most highly specialized in the world. In recent years the competition between the leading manufacturers of Europe and America for supremacy in the world market has resulted in a keen rivalry to produce the most serviceable pencil for various purposes. The aid of chemical science has been enlisted with the result that the best pencils in use to-day are infinitely superior to the best of a few years ago.

Morton, Phillips & Co., Montreal, are introducing to the Canadian market, the new "Castell" pencil, made by A. W. Faber, of Stein, near Nuremberg, one of the most famous of the best-grade pencils.

This new series of drawing pencil is the product of a series of investigations and experiments of a technical nature, extending over several years, under the direction of specialists. The manufacturers have been fortunate in having available graphite of practically perfect quality and have brought it to the point of drawing pencil perfection.

As it is made in sixteen degrees of hardness, from 6B yielding the soft, rich color of India ink to the extremely hard 8H for drawing on stone, it is adapted to every need of office or drafting room, for the designer or draftsman, the engineer or for general use by office clerks. These pencils may be sharpened to an exceedingly fine point, firm and durable, thus adding very materially to the life of the pencil.

Manufacturers buying large quantities of pencils will find it worth while to get a sample of this new pencil from Morton, Phillips & Co., 115 Notre Dame Street, Montreal.

THE WINGED SEEDS.

Consider the industrial phase of advertising by comparing the advertisements in the average trade journal of to-day and those of ten years ago: Then a manufacturer would hand his business card as "copy" for his space and think he was advertising. Frequently he didn't expect any results—he merely liked the personal items the trade journals of that time printed about him when he cut off his whiskers for the summer—or let them grow again in winter: "The rising young general manager of The Rat Trap Manufacturing Company, Mr. Squint Madibs, is raising a fine set of G-string whiskers for the winter;" or, "Mr. Madibs has amputated his G-string whiskers for the summer," as the case might be.

You often hear a manufacturer say: "We do not advertise."

This man does not know what he is saying. Many concerns are advertising and don't know it. When they write a letter relating to the sale of goods they are advertising. When a concern has a salesman on the road it is advertising.

The average traveller under average conditions can make about 600 calls a year, or, say, 300 calls, including the same people, twice a year. By a mail campaign—letters or circulars—a concern will make say 5,000 calls a month. While of these mail calls may not be as effective, yet it pays through the increased territory covered at the relatively small cost. Then, again, it may be missionary work as an introduction for the salesman who calls in person.

A maple tree in the forest casts off many hundred thousand winged seeds in a season, but only a very small proportion of them take root and grow.

Yet, by this little mail advertising campaign, the maple tree family have been in business and prospered for centuries.—Common Sense.

POINTS TO REMEMBER.

Always keep your pen clean and regularly filled.

Pens should always be carried in an upright position in the pocket with the point up. In carrying pen always protect point with the cap.

It is better to elevate the point of the pen about an inch when laying it down.

It is not advisable to remove pen and feed from setting or holder—this should be done only by an expert—to insure perfect writing and feeding minute adjustment is necessary.

To insure the best results the same brand of ink should always be used. As far as possible avoid filling your pen from an open inkstand. Such ink generally contains dust and dirt which will clog the feed and necessitate frequent cleaning.

In order that a pen may retain its special adaptability for your own use it is not advisable to allow other people to use it.

WHY DO FOUNTAIN PENS "SWEAT"?

A fountain pen "sweats" or leaks for one of three reasons.

First: The pen section is not screwed on the barrel tightly.

Second: The little holes in the cap or point-cover become filled with dirt. These little holes are put in the cap for the express purpose of allowing any evaporation from the holder to pass out. When they become clogged the evaporation condenses and settles inside the cap.

Third: When the cap is put on with a snap before allowing the ink to flow back into the holder, thus causing an air pressure sufficient to force the ink outside of the feed.

If you wish to prevent a "sweaty" pen bear these things in mind:—

Screw the pen section on tightly.

Keep the little holes in the cap open and clean.

Hold the pen upright before placing on the cap and then put it on easily, giving the cap a slight twist.

Typewriter Supplies
 Typewriter and REPAIRS
 Office Furniture
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Phone Main 2775

CHARLES B. WALSH
 General Typewriter Agency
 30 St. John Street MONTREAL
 Various makes of Typewriters, new, second hand and rebuilt.

CANADA'S MANUFACTURERS
 1909 - Industrial Blue Book - 1909
BUYER'S GUIDE
 Published on Subscription only
The Manufacturers List Co.
 Montreal and Toronto, Canada.

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BUSINESS MEN

JOHN MACKAY & CO.
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ANY COLOR OF CRAYON
 that you want can be obtained from us.
 We are specialists for Cotton, Woolen
 and Worsted Manufacturers. No trouble
 to send samples.
LOWELL CRAYON CO., - Lowell, Mass.
 Original Manufacturers.

MERCANTILE LAW (Anger)
 Gives the Business and Banking Laws
 of all the Provinces and Newfoundland, with
 forms and decided cases. Has recent changes
 in Lien Notes, Bills of Exchange, Stock Com-
 panies, Mortgages, etc., and is recommended
 by the Institute of Chartered Accountants.
 New edition, **Price, \$2.00.** A previous edition
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COMMERCIAL LAW (U.S.) New edition,
\$2.50.

BOOKKEEPING (Advanced)
 Partnership, Stock Company and Bank
 Accountancy, Systems, Sheets and Short Cuts
 used in modern accounting. 308 pages. **Price,**
\$3.00.

Wilton C. Eddis, F.C.A.
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 Telephones
 Office, Main 294 House, North 1628
 Office—9 TORONTO STREET

THE
Toronto Paper Manufacturing Co.,
 Cornwall, Ont.
 Manufacturers of Engine Sized Superfine
 Papers, White and Tinted Book Papers, Blue
 and Cream Laid and Wove Foolscaps, Account,
 Envelope and Lithographic Papers, etc.

INTEREST TABLES (Coffin's)
 From 1 to 10 per cent. 6 x 9, cloth, **Price,**
\$2.00.

TAX TABLES (Montgomery)
 From one tenth of a mill to two mills.
 From \$5.00 to \$50,000. **Price, \$2.00.**

The ROLLAND PAPER CO.
 HIGH GRADE PAPER MAKERS
 Makers of
 "Superfine Linen Record"
 "Earncliffe Linen Bond"
 "Empire Linen Bond"
 "Colonial Bond"
 Grand Prix, Paris, 1900.
QUEBEC MONTREAL TORONTO

EDWARDS, MORGAN & CO.
 CHARTERED ACCOUNTANTS
 18-20 King St. West, Toronto
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EDWARDS & RONALD, WINNIPEG

**BUSINESS CORRESPONDENCE AND
 LETTER WRITING.** 5 1/2 x 8. **Price, \$1.50.**

BUSINESS MAN'S DICTIONARY.
 33,000 words - indexed - morocco - gold
 edges. **Price, 75c.** (In cloth, 30c.)

**MANUAL OF PROCEDURE at Meetings
 of all kinds (Bourinot).** **Price, \$4.00.**
 (Small edition, cloth, \$2.00)

Your order is solicited—we pay the post-
 age and can supply any other books you may
 require.

Agents Wanted
D. A. ROSS
 Box 394 SARNIA, ONT.
 Reference—Bank of Toronto, Sarnia.

A. W. FABER'S



"CASTELL"



The Best Pencil Made

Drawing Pencils
 16 Grades

Unsurpassed for purity, smooth-
 ness, durability or grading

6B Extra Soft and very deep black
 5B Extra soft and very black
 4B Very soft and very black
 3B Very soft and very black
 2B Very soft and black } Best
 B Soft and black } for
 HB Less soft and black } Writing

H Hard
 2H Harder
 3H Very hard
 4H Extra hard
 5H Extra hard
 6H Extra extra hard
 7H Extra extra hard
 8H Specially extra hard

For architects,
 engineers and
 draughtsmen

Copying Pencils -- Hard, Soft and Ink

Price 10 cents each, \$1.00 a dozen

MORTON, PHILLIPS & CO.

Stationers, Blank Book Makers and Printers

115-117 Notre Dame St. West

MONTREAL

Graphic Chart Shows Profit and Loss

A Simple Graphic Chart Which Tells Just What a Machine, a Department or a Plant Will Produce, the Loss or Profit it Will Show at Every Stage of Operation.

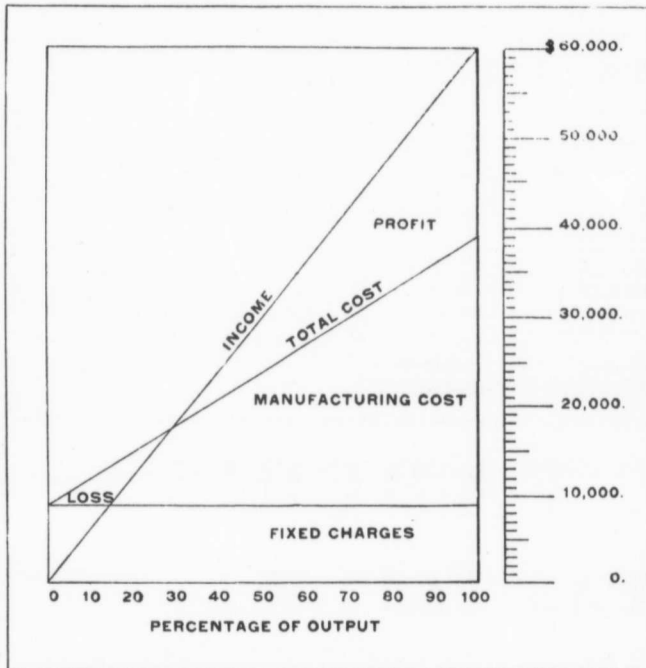
By JAMES A. WHITE, M.E., IN SYSTEM.

Whenever the maximum output can be estimated from the proposed operation of a business or any phase of it—machine, apparatus, or manufacturing plant—a graphic chart can be drawn up which will show the possibilities for profit in an enterprise before operation.

Many times it is important to have at least approximate figures of what profits may be expected from an enterprise. In such

the sum of such expenses as light, heat, power, taxes, insurance, rent, salaries and wages for non-productive labor, depreciation on plant, interest on loans, and similar items. From the point so found draw a line across the diagram parallel with the base, the assumption being, as is approximately the fact, that the fixed charges remain constant regardless of the output.

A line representing the total cost, or sum



The graphic chart used to show the exact percentage of loss or profit at every stage of output in a factory or business concern; by it the figures for maximum output may be computed.

cases in manufacturing the graphic chart can be used as illustrated in this article. The process requires few lines and little effort in computation of figures. It is designed for quick and accurate use as the example shown proves. At a glance the results desired may be obtained with ease. In fact the diagram is self explanatory. It is designed to show the percentage of loss or profit at every stage of output—especially the point where output reaches a profitable basis.

HOW THE LINES ARE DRAWN TO SHOW TOTAL COSTS.

Two scales are laid out. A base line representing percentages of output and a vertical scale divided for dollars. Lay out on the scale of dollars the point which represents the amount of the fixed charges, which in a manufacturing plant would be

of the fixed charges plus the manufacturing cost, will be a diagonal as the manufacturing cost, which includes all material and labor used in the finished product, varies in direct proportion with the output. This line should be drawn from a point on the maximum output vertical, representing the sum of the fixed charges plus the estimated manufacturing cost of the maximum output, to the junction of vertical of no output and line of fixed charges.

HOW THE PROFITS OF AN ENTERPRISE MAY BE COMPUTED.

A third line representing the income will also be a diagonal as the income will vary in direct proportion to the output. This line should be drawn from a point on the maximum output vertical, representing the income to be so derived, to the base line at point of no output.

The diagram will then show graphically the amount of profit or loss to be derived from the proposed enterprise, with varying percentages of output up to the maximum; the percentage of possible output that must be secured to prevent loss; and the extent of the profits to be realized through increasing the output from the point where profits begin. In fact, all information required may be computed by this graphic plan.

In the diagram shown it is assumed that the fixed charges are \$9,000; that the manufacturing cost is \$30,000 and the income \$60,000 for the maximum output. The income line crosses the total cost line at the vertical, representing thirty per cent. of the output, showing at a glance that a loss will ensue if less than thirty per cent. of the maximum output is turned out. At fifty per cent. of the maximum output the diagram shows a profit of about \$6,200 with a total cost of about \$23,800, or about twenty-six per cent. profit.

WHAT MAXIMUM OUTPUT MEANS IN PROFITS TO MANUFACTURER.

With the maximum output, however, the profit shows \$21,000 with a total cost of \$39,000, or a profit of nearly fifty-four per cent. This shows very strikingly the great financial advantage of securing maximum output from any apparatus or manufacturing plant in all lines of business.

Many applications of this form of diagram will suggest themselves. It is applicable to the output of mills, furnaces, and factories as well as to individual apparatus or machines; to power plants, to office expenses, to sales forces, as well as to manufacturing.

The simplicity of the chart makes it especially practicable to any business where calculating of this cost is desirable. The fact that it is not complicated will make it appeal to all classes of business men, for it will enable them easily to compute output figures. And the importance of thus analyzing production capacity is fully apparent.

Ink Eradicator Pencil

An effective ink eradicator in convenient form for removing blots and stains from paper and clothing is being manufactured by the Collins Ink Eradicator Co., Hoboken, N.J., and sold in Canada by Morton, Phillips & Co., Montreal.

The acid element of the eradicator is held in a narrow necked bottle about four inches long, shaped somewhat like a pencil, and about twice the diameter of an ordinary lead pencil. From the bottle the acid may be applied much as one would write with a stylograph pen. The alkali element is contained in a chemical blotter wrapped around the bottle or "pencil." The liquid is simply applied to the ink stain, which is then blotted by rolling the pencil on it, and the trick is done. A rubber cap prevents evaporation when not in use.

Romeo Letter Copier

The Romeo, no water, no carbons, letter copier have placed the control of their product for Canada with the Wood, Green Sales Co., Toronto. More information in regard to this extremely interesting machine will follow in our next number.

They are to be on exhibition at the Business Show.

Discounting Bills

By F. R. BOOCOCK IN BUSINESS.

In these days of close competition and narrow profits, the business man, to be successful, must study every detail of his affairs with careful scrutiny. It is by this means alone that he can discover where unnecessary expense can be cut off, and where additional profits can be realized without sacrificing liberality toward patrons and without diminishing the popularity of his store. It is frequently discovered that a merchant, while progressive in most matters, still fails to perceive the profits to be made from discounts. A case in point comes to my mind: Some time ago a customer of a certain house was found to be very tardy in his payments. Investigation of his statements made to the commercial agencies showed that he was in good financial condition, having a surplus of some \$20,000 over all indebtedness. He carried a stock of about \$10,000. His annual sales were about \$30,000, which would indicate that he turned his stock three times a year. In other words, with a capital in use of only \$10,000 he was doing a business three times that volume in amount. This is an important fact to bear in mind. It was found further, upon investigation, that this merchant, in common with many others, had gained the idea that he could place his money in outside investments to better advantage than would follow from using it in his business.

Finally, I had the opportunity to do some figuring for this man. In some lines of goods which he carried he received a discount of 6 per cent. on bills paid in ten days. In other lines the discounts varied, grading down to 2 per cent. for the minimum. The average discount allowed for prompt settlement was 4 per cent. It was soon made clear that, inasmuch as the capital employed, say \$10,000, was used for purchases three times a year, and each time by claiming discounts was entitled to 4 per cent., it was possible to make a profit of 12 per cent. per annum upon the investment through this means alone. The merchant at once perceived that a yearly income of \$1,200 upon a capital of \$10,000 is a much better return than he could expect from any outside operations that are absolutely safe.

How Many Multigraphed Letters in Your Mail?

Probably a great many more than you ever suspect—a great many that you consider as individually typewritten—for an accurate estimate shows that

Gammeter Multigraphs

are writing 30,000,000 letters per month

Although produced at the rate of 3000 to 6000 per hour, every Multigraph letter is a perfect typewritten original.

The Gammeter Multigraph typewrites form letters that are identical with the work of a regular high-grade typewriter. It turns out copies faster than any duplicating device, and each copy is a perfect ribbon-printed original. The Multigraph will take paper and cards of any weight and of any size from that of a postage stamp to a sheet $8\frac{1}{2}$ x 17 inches, and is easily operated by any office boy or girl. There is nothing mussy about the operation of the Multigraph, it is as clean as a typewriter.

As an Office Printing Machine

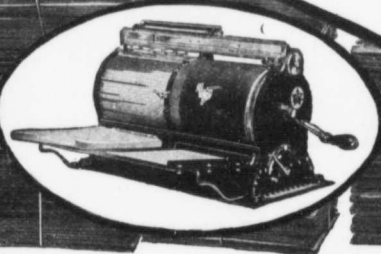
The Gammeter Multigraph enables you to get an office form printed immediately, in your own office, and insures privacy on confidential matter. Electrotypes may be used on the Multigraph and a direct inking attachment is supplied for work not requiring actual typewriting. The Multigraph will print all sorts of office forms, card index supplies, postal cards, tabulated reports, quotations, etc., in any style of type desired, and at practically the bare cost of paper, and an office boy's time.

LET US SEND YOU SAMPLES

of forms printed on the Gammeter Multigraph, together with a Multigraphed typewritten letter addressed to you personally. Simply send us your name, the name of your firm, and the position you occupy. We will also send descriptive booklet or catalogue.

The American Multigraph Sales Co.
1813 Case Ave., Cleveland, O.

Canadian Address:
28 Adelaide St. W.
TORONTO, ONT.
European Selling Agents:
The International
Multigraph Co.,
79 Queen Street,
London E.C.



The question arises in many cases how to take advantage of discounts when ready cash is not at hand. This, however, is a problem of no very great difficulty, provided the business is in good condition and shows by the relation of live assets to liabilities that the merchant is entirely solvent and in possession of a reasonable surplus. Money is plentiful in the banks, and bankers are always ready to lend to responsible borrowers. The rate of discount at which

money can be secured from a bank is rarely above 6 per cent. per annum. Accordingly the merchant who occasionally borrows from his bank for the purpose of claiming discounts which net him 12 per cent. per annum, is enabled to make a clear profit of 6 per cent. upon the transactions. Or where he borrows for all his payments, with a business of the size mentioned above there is still a gain of \$600 in discounts.

Later Date Set for Business Show

Information Supplied by E. R. Wood, One of the Managers. Date Fixed for Nov. 16 to 21. Names of Exhibitors. Detail Information.

In order to secure a more favorable date, after election excitement has subsided, the management of the National Business Show, Massey Hall, Toronto, have arranged to have the show on the week from November 16 to 21.

"We are already sure of a representative business show," said Mr. Hen. R. Wood, one of the managers, to THE OFFICE EDITION. "It will comprise a diversity of displays of office equipment and specialties such as has never before been gathered together in Toronto."

"The reason for holding business shows," continued Mr. Wood, "has been shown beyond question in the United States. Every business man is searching for ways to improve his business methods, in office, factory or warehouse. He is on the alert for new things, new ideas, short cuts of all kinds. He is not content to let his employees decide what new machines or appliances shall be installed or rejected. Yet he has not time to go about from one place to another to examine in operation all the specialties he hears of.

"The business show solves this problem. Busy men spend a few hours at such a show and have the opportunity of closely examining under most favorable conditions any specialties they have become interested in or that may win their attention as they pass by.

"We have already assurance of an exhibition that will attract leading business men to it. Among the concerns who have already expressed their intention of taking space are the following:

- 5—Reserved for Library Bureau, Ottawa.
- 15—Defiance Machine Co., Rochester, N.Y.
- Baird Mfg. Co., Chicago, Ill.

- 16—Universal Folding Machine Co., Chicago, Ill.
- Acorn Brass Mfg. Co., Chicago, Ill.
- 17—Canadian Appraisal & Audit Co., Toronto.
- 18—CANADIAN MANUFACTURER Pub. Co., Toronto.
- 19—United Typewriter Co., Toronto.
- 29—Reserved for Adams Furniture Co., Toronto.
- 30—Monarch Typewriter Co., Toronto.
- 32—The MacLean Publishing Co., Limited Toronto.
- 31 and 36—Elliott Fisher, Limited, Toronto.
- 32—Reserved for the Smith-Premier Typewriter Co., Syracuse, N.Y.
- 33—International Time Recording Co., Toronto.
- 37—American Multigraph Sales Co., Limited, Toronto.
- 38 and 39—Reserved for Remington Typewriter Co., Toronto.
- 40—Universal Polygraph Co., Toronto.

In addition to the above the managers of the business show have reserved several spaces under special representation contract with United States manufacturers of office appliances and equipment.

"Among the specialties to be shown by these concerns are adding and listing machines billing machines, typewriters, duplicating machines, office furniture, a machine which sorts, counts, and packs coins, rejecting bad coins of wrong size, folding machines, time recorders, appraisal and audit systems, dictation machines, envelope sealing machines letter copiers, office systems, etc. To see all this machinery in operation and to have a full opportunity to compare different makes of machinery of similar class will be worth the time and attention of business men.

"Tickets for this show may be secured on application to any of the firms mentioned.

forms could be printed right through at one writing with the insertion of a sheet of carbon paper, this work could be cut in two. The saving of one operation was thus to be accomplished by the simple detail of providing the proper arrangement of the matter on the forms, so that they could be used with a carbon sheet.

OBSERVATION REVEALS ECONOMICAL METHODS.

Another example of a similar nature was that of an insurance concern, wherein an immense amount of work accrued from the necessity of filling in blank notices of premiums coming due for mailing to policyholders, and the subsequent writing out of a receipt for same when remitted. The method pursued without a thought of possible improvement, was to run one slip into the machine at a time and fill it out—the notice at the time it was sent, and the receipt later, after premium had been paid. A bright typewriter system man came along with his eyes open and perceived the possibility of printing several forms on one sheet and saving the insertion and withdrawal of the form about five times out of six. He further perceived the perfect feasibility of making the sheet of receipt forms register with the notification forms, since they contained practically the same typewritten matter, i.e., name, address, policy number, amount of premium, etc. This was done. A sheet of six receipt forms, now register with six notification forms, and with the insertion of a sheet of carbon paper, both are filled out at one writing.

A very simple matter is the development of such improvements as this, yet it is generally overlooked to-day. The saving in time effected amounts to a good many dollars in a month or a year, and is worthy of attention.

SPECIAL MACHINES.

It is pertinent here to call attention to some of the admirable developments due to the initiative of typewriter companies in adapting their machines to special requirements.

In the use of the loose-leaf sales journal, the typewriter is now adapted to write a bill and a journal record at one writing. This is accomplished by a special construction of the platen, which provide two sets of feed rolls, the outer set grasping the wider sheet, which is the sales journal sheet, and the inner pair grasping the bill. A lever operating the inner rolls, permits of the insertion of a bill, and its withdrawal independent of the sales journal sheet. In combination with a sheet of carbon the result is to permit the writing of one bill, the carbon duplicate falling on the sales journal; the bill being withdrawn a fresh bill-head inserted and another bill written, the carbon duplicate falling below the previous one on the sales journal record, and so on, until the sheet is full, when it is re-inserted with the opposite side out, and this page filled with the charges, whereupon it is returned to the binder, and a fresh sheet taken. This process provides a typewritten sales journal, easily deciphered for posting, neat, legible, and an exact copy of the bill. It is a condensed record, easily footed and carried forward to the end of the month, providing a total for cross entry to the credit of merchandise. Compared to the obsolete copy book the result is infinitely superior.

Typewriting and Loose Leaf Methods

Noting Some of the Ways in which the Utility and Perfection of Both May be Enhanced.

By H. C. TUTTLE IN OFFICE APPLIANCES

The average office has not really awakened as yet to the fact that the typewriter can be something besides a letter-writing machine. Some of the modern offices, wherein some advanced "spirit" dwells, have indicated some of the ways in which the combination of some unique system and the typewriter has been planned with special reference to the most economical and comprehensive way of doing things.

The fact that the typewriter can be made to do something besides write letters seems scarcely to have dawned upon a great many individuals and concerns. Asked if they do their billing on the machine, they will reply, "No, we haven't time to do it that way." Just as if the fact that they were writing their

letters on the machine was not on the basis of it being neater and quicker.

As illustrative of how little thought is given to the combination of methods to accomplish the best and most economical results; in a certain concern the billing was being done on the typewriter and in addition it was necessary for a slip to be written for the collection department called a "Draft Notice," which was filed in a tickler system to call up the date upon which it would be desired to make draft on the consignee for the amount of the bill. This was being done with two operations—writing the bill, and writing the slip. By simply printing their forms in register, so that the information which was called for on both

HOTEL TOURNAINE

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Delaware Avenue at Chippewa Street
ABSOLUTELY FIREPROOF
 250 Rooms with Bath
 and Long Distance Telephone
EUROPEAN PLAN
\$1 50 per Day up
 With Bath connection
EXCELLENT MUSIC AND GRILL ROOM
C. N. OWEN, Prop.
 Send for Booklet

A TIP TO

Travelers



Why pay \$2.00 for a stuffy room in a second-class hotel, or \$4.00 for a cheerless apartment in a first-class hotel

in Chicago

when you can secure comfortable lodging, supplemented by a Turkish Bath, a scientific rub, a shower and a plunge in the finest swimming pool in America for

One Dollar

Moral: When in Chicago stop at

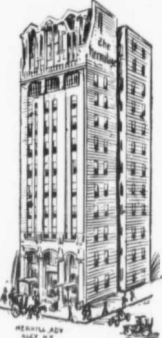
The New Northern Baths and Hotel

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14 QUINCEY STREET, Near State
 In the very Heart of the City.

NEW YORK CITY

The Hermitage

A CLUB HOTEL FOR MEN
The name tells the story
 Seventh Ave. and Forty-Second St.
 Junction of Broadway



Restaurant on the street floor, — a restaurant where ladies are welcome.
 Every other part of the house exclusively for men.
 Telephones in every room.
 Respectful, quiet, obedient and alert Japanese servants.
 Bedroom and bath, \$2.00 a day upward.
Send for Booklet.

T. F. PADDELL, Proprietor

HOTEL NORMANDIE

Congress Street
 Near Woodward Avenue
DETROIT, Michigan



American Plan,
 \$2.50 per Day and upwards.
 European Plan,
 \$1.00 per Day and upwards.
 Hot and Cold Running Water in all Rooms.
 Rooms with Bath extra.
A High Grade Cafe
 Restaurant and Buffet in connection.

GEO. FULWELL
 Proprietor

NEW YORK

HOTEL SCHUYLER

57 to 63 West 45th
 Between 5th and 6th Aves.

Most satisfactory accommodations for tourists; center of shopping and theatre district; rates ranging from \$3 to \$5 per day, with board, or sitting room, bedroom and bath at \$2 to \$4 per day, without board.

M. LUEZ

Established 1849.

BRADSTREET'S

Capital and Surplus, \$1,500,000

Offices Throughout the Civilized World.
EXECUTIVE OFFICES,
 346 & 348 Broadway, New York City, U.S.A.
 CORRESPONDENCE INVITED.

OFFICES IN CANADA:

Halifax, N.S.	Hamilton, Ont.
London, Ont.	Montreal, Que.
Ottawa, Ont.	Quebec, Que.
St. John, N.B.	Toronto, Ont.
Vancouver, B.C.	Winnipeg, Man.

THOMAS C. IRVING, Gen'l Manager Western Canada
 TORONTO.

In the preparation of monthly itemized bills or statements, a plan has been devised whereby a form is printed with a right-hand end fold perforated, the top form constituting a customer's bill, and the duplicate of the sales record. The object attained is that of securing at one writing this customer's bill, and a sales record, by the use of carbon paper between the sheets, and the insertion of the form each time a posting is made throughout the month. The set of forms being kept in the interim in cabinets or binders.

In the adaptation of the machine to this class of work, some manufacturers have provided a means of inserting the carbon paper with the same movement that inserts the sheet in the machine. In other words, the machine is provided with a carbon mechanism, an integral part of the typewriter itself, which obviates the necessity for inserting the carbon paper in each instance by hand. The result is a rapid rate of posting, exceeding the speed attainable by hand.

Typewriters are also to-day provided with "tally rolls," the function of which is to list the total of debits or credits or both, one line to a bill, automatically without further attention than is necessary to the accomplishment of the regular work of making out the bill. The result secured, is that of a strip of paper which can be detached from the machine at the end of the day, or whenever desired, which shows item by item, the total of the various bills rendered on the machine. These are quickly run through on a calculator and the grand total arrived at, which serves as a check on the accuracy of the work done, and total for cross posting if desired.

ADAPTABLE SYSTEM.

In the combination of forms, there is practically no limit to the variety of combinations that can be secured. The best results being attained when all factors are carefully considered, and the system made mobile as well as comprehensive. Bill and order sets run all the way from simple three or four form sets, consisting of unextended bill, and factory copy, with posting copy, and perhaps shipping copy, up to sets containing ten or a dozen forms, comprising the requirements of the cost, the shipping, the accounting, and the sale departments. In every case, I repeat, the consideration of mobility as well as scope should rule.

It is possible to discover from time to time, in every large office methods of utilizing the typewriter in an intelligent way in combination with other system to accomplish economical results.

From such simple combinations as these, I proceed to more complicated cases. In the event of desiring to combine a set of forms wherein one form in the set is to contain but part of the information written on the original, the result can be accomplished in two ways: If it is an upper or a lower corner of the form, from which it is desired to exclude the writing, the carbon paper may be cut out in that corner. If but a little carbon paper is used for this purpose it may be done in the office, but if required in quantity, it can be cut out by machinery in a properly equipped print shop, or loose-leaf factory.

The same result can be attained, where-

in the conditions are more difficult, as for instance, if the matter not desired on the carbon copy should be in the centre of the page or across the top or bottom, by using carbon paper with an uncarbonized section, which can be secured from manufacturers.

If it be desired to produce a carbon copy which shall be red to correspond with the original, as in the credit column of statements, or black in other sections, the result is secured by the use of carbon paper made in the two colors combined.

Should it be desired to write on two or more sheets with carbon interleaved, and have the carbons bear matter not written on the original, it may be accomplished on machines with the two or three-color ribbon feature, by using a ribbon having an uninked portion, and throwing this portion into action when it is desired to omit any matter on the original. The effect of this being that the uninked ribbon would make no record on the original, but the force of the blow would write through on the carbon copies just the same as on the inked portions.

PREPARATION OF FORMS.

In the manufacture of forms for the typewriter a small but important detail is their assembling in such shape as to permit of their being readily interleaved with carbon, and inserted in the machine without shuffling out of registration. This can best be accomplished by the printing of at least two of the forms together, perforated at the fold, so that (taking the shape of a filing jacket or folder) it permits

being facilitated by the perfection of the loose-leaf books for this purpose. A new type recently patented and manufactured in Chicago provides a loose-leaf binder for record purposes, which can be readily opened and pages inserted, until the final page is inserted, and then by a simple manipulation the binder closed forever. It being impossible to open the binder without breaking it entirely apart and destroying it, after this final locking.

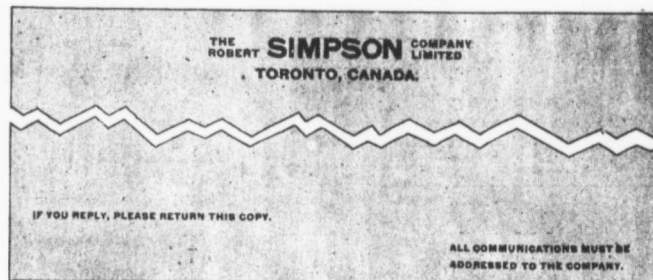
Time Saver for Correspondence

By Frederick Nelson of the Robert Simpson Co., Limited, in SYSTEM.

Even with the present time-saving correspondence methods, a reply to a letter received several days or weeks subsequent to the dispatch of the original, necessitates some amount of time in tracing the copy of the original on file or in the copy book.

Especially is this true of letters sent on long journeys to foreign countries where considerable time is involved in the transmission of the mails. The following system for refreshing the memory of any person who may have to wait some time before he receives a reply to his communication, is in use in the offices of the Robert Simpson Company, Limited, Toronto. It is found to meet the needs of foreign correspondence in every way.

When a letter is written to some distant foreign address, a tissue carbon copy bearing printed instructions for its return (Form 1) is made along with the original letter, and the copy for filing, and is mailed attached to the original letter. If the recipient of the



Form 1.—Tissue Carbon Copy.

of the assembling of the other forms between. This makes a compact set which has the folded edge at the top, permitting of easy feeding into the machine, and convenient handling.

In this case the office boy can prepare the forms and have them ready for instant insertion in sets, carbon paper and all, by the operator. Every detail should be planned with special reference to the saving of time of those whose time is more valuable or specialized, at the expense of the employees of smaller wage.

In the preparation and keeping of city and county records, the typewriter is coming more and more into utility. The records being more readable, and the space required for record being much reduced when copying is done on the typewriter.

The introduction of the record work is

letter replies, he sends back the carbon copy attached to his own answer so that when the writer of the original letter receives the latter communication, he has both his own letter and the reply before him and need not trouble about having the copy in the files looked up with the resulting delay.

In making this tissue carbon, little extra work is incurred, as the stenographer has only to insert it in the typewriter along with the regular copy.

Review of Catalogues

THE TIME KEEPER—is the title of Bulletin No. 5, Munderloh & Co., Victoria Square, Montreal. This bulletin is devoted to description of the "Simplex" Time recorder, and its uses. It is attractively printed and fully illustrated.



DON'T be satisfied with an ordinary position. Don't be just one of the crowd—"Stand Out!" It is a duty that you owe, not only to yourself, but to those dependent upon you.

You can in your spare time fit yourself for a position where you will not only receive a better salary, but where you will be looked up to as a man of force and influence—where you will be able to bring into play all those positive qualities now lying dormant within you—where you will "Stand Out!"

The Sheldon School

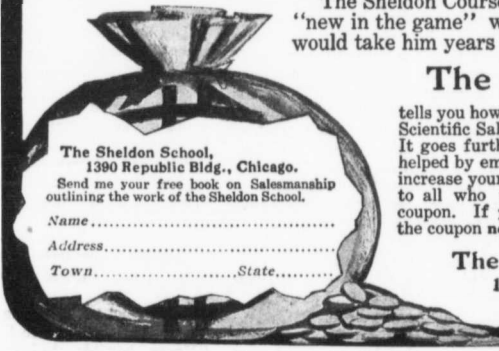
by its course of correspondence instruction in Scientific Salesmanship has helped over 31,000 men to "Stand Out!"—to increase their scope—to increase their earning capacity—to increase their influence—to develop their character—to become top-notchers in the best paid of all professions—Salesmanship.

The Sheldon Course of Scientific Salesmanship helps experienced salesmen to earn still bigger incomes. - More than half our students are veterans—strong men who have won in many a hard-fought selling campaign.

The Sheldon Course gives to the man who is "new in the game" working principles which it would take him years to hammer out for himself.

The Sheldon Book

tells you how and why the Sheldon Course in Scientific Salesmanship does all these things. It goes further—it tells you how you can be helped by employing your spare moments to increase your own worth. This book is free to all who fill out and mail the attached coupon. If you want to "Stand Out," mail the coupon now.



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1390 Republic Bldg., Chicago.

Send me your free book on Salesmanship
outlining the work of the Sheldon School.

Name

Address

Town.....State.....

The Sheldon School,
1390 Republic Bldg., Chicago.

Influence of Duplicating Machine

How the Duplicating Machine Influenced Business, and Revolutionized the Circular Letter, What May Be Done in the Future. From Office Appliances, July, 1908.

The present day business man has come strictly to the four walls of his office. His business is done now under the supervision of his eye; not a part here and a part there, all of which means an indirect supervision, but all right where he can get to it, see to it and know all about it. There are many reasons for this, chief of which is to meet the forces of competition.

One of the greatest influences in bringing about such a condition is the duplicating machine. It has opened up an avenue between the house and the buyer greater than ever was thought possible to bring about. It has drawn buyer closer to the house in a way that never was dreamed. Thus, does the business man develop an organization that is compact and effective. He is not compelled to look elsewhere for an agency that may or may not do his work.

This is, of course, a part of the advertising propaganda. But there are many forms of advertising; so many, in fact, that some business men are free to declare that all business is advertising. Be that as it may, the duplicating machine has restored a form of advertising that was in some respects fast passing out of existence; because business men said it was not successful. That form of advertising is the circular letter, the agency that has brought the business man and his prospective customer close together; the thing which has made business organizations more compact—the very thing, indeed, that is responsible for many businesses.

INFLUENCING THE MARKET.

A wrong impression should not be had of the term, "circular letter." There used to be a lot of riff-raff publishing houses up in Maine and thereabouts that sent out fifteen and twenty years ago a circular letter that would be a stench in the nostrils of the modern business man. And there are some concerns doing business to-day that use the circular letter who would not be admitted to an ordinary business conference. So in whatever way the circular letter is looked upon, pray, do not confuse it with the ones above mentioned.

The duplicating machine is the power behind the circular letter. But this same machine has drawn another distinction that must not be overlooked, and that is, that the circular letter is coming to be called the "typewritten letter." Right there the success of the duplicating machine rests. It really has no connection with the old circular letters. But it is responsible for the typewritten letters; has made it a success and revolutionized that means of communication between house and buyer.

So marked has been the development of this specialty field in the past three years, yes, in the past twelve months, that a large number of large business houses have established what they call the "Duplicating Department," another evidence of the directness of business organizations. These departments are equipped with the latest duplicating machines, operated by employees who give their entire time to the work and a

correspondent who is skilful in getting up form letters. There are several houses in the central west who have installed such a department in the past sixty days. The necessity for such is apparent.

There have been several in operation in the East for several months and the results have been more than satisfactory. As an illustration of how important the duplicating machine has become the following case is interesting.

The representative of one of the largest duplicating machine companies in the country was visiting Milwaukee several months ago. The firm on which he called had been spending several hundred dollars each year on its card and circular work, by the old process. The representative took his machine to the offices of the company, demonstrated it and asked to see some of the forms of cards and other matter the company was using. After noting these carefully, he got estimates from a paper company on some paper stock, estimates from the engraver on plates and then sat down to figure with one of the officers of the company. The exact cost per thousand to the company for the work they had been having done outside was \$2. The salesman after allowing liberally for all estimates added another 10 per cent. to make sure of any extra expense, and showed the gentleman that he could do the work on his machine at a total cost of fifty cents per thousand. The figures were so plain and the evidences of the work of the machine so clear that the company ordered three machines and soon afterwards established a "duplicating department."

ADVANCED STEPS REACHED.

This is one of the remarkable things that have come to this specialty field in the past two years. It has proven beyond all doubt that the duplicating machine has been substituted for every possible form of circular work. Then again. It has shown conclusively that the old circular letter, that obnoxious and nauseating affair that has ordained more waste baskets than it has office desks, is entirely a thing of the past.

Thus, there is reached the vital and important step in developing the market of this specialty; namely, the step firmly marked by the typewritten letter. In this way the circular letter has been made to exist in name only. To-day there is scarcely a firm in the entire country that dares to send out its circular matter by the old process. The duplicating machine has made the circular letter so nearly like the ordinary typewritten letter that it is pretty nearly impossible to tell the difference.

Another step reached by the duplicating machine is the one that has convinced most business men that the value of the duplicated letter is not so much in the process as in the way the letter is got out. The text and style are infinitely better than the old way. This perhaps counts for more than any one thing. The business man realizes that when his letter reaches its objective point

much depends on how it looks whether it gets to the firm or individual.

There is a standing rule among most houses that the office boy or mail clerk shall destroy all circular matter or anything that looks like circular matter. If the letter is sent on the duplicating machine it is a safe bet that it will be read by some one of the firm.

But a live point to remember is that while the typewritten letter has proven its worth, the letter itself should always be sent out under a two-cent cover. A gentleman representing another specialty machine in the central west spent several hundred dollars not long ago in arranging a circular letter. The work was splendid. But he sent the letters out under a one-cent cover to save a hundred dollars. The replies were not satisfactory.

WHAT MAY TAKE PLACE.

This survey of the field of the duplicating specialty leads to another and more vital issue: What will evolve from so pronounced a success? If you will inquire among the men who are pushing the sales of these machines, the most of them will tell you that the result is plain. There is one result that cannot be ignored. The duplicating machine will, they say, in a short time be purchased more for its printing feature than for its duplicating feature. As the case now stands the duplicating feature is only about fifteen per cent. of the whole, while the printing feature is the remainder.

The reason is obvious. The large business house particularly is desirous of securing the greatest possible saving in time and the largest degree of efficiency. Clearly, the only way to reach this result is to enlarge the machine in its printing capacity. This is a condition similar to that which preceded the installation of the linotype.

But the duplicating feature will needs remain the pivotal one, after all. With the perfection of them both, the specialty may be said to have reached a point in the office device field far in advance of anything anticipated for it.

POOR RICHARD JUNIOR'S PHILOSOPHY.

Gold comes in quartz and goes in magnums. The woman who "can't bear Society" is never in it.

The lie that goes farthest is the lie that has a little truth in it.

If you would learn to blow your own horn, begin by keeping a stiff upper lip.

There's small choice: if you don't let her make a fool of you, she'll make a fool of herself.

The Bull of yesterday is the Bear of tomorrow, but the Lamb is a lamb until he is fleeced and afterward—sometimes.—Saturday Evening Post.

Once Sir Henry Irving, while playing "Macbeth" in London, was somewhat disconcerted by one of the "gallery gods." He had reached the point where Macbeth orders Banquo's ghost to leave the banquet board. "Hence, horrible shadow, unreal mockery, hence!" exclaimed Irving in his most tragic tones, and with a convulsive shudder sank to the ground, drawing his robe about his face. Just as Banquo withdrew, an agitated cockney voice from high up in the gallery piped out as if to reassure Irving: "It's all right now, 'Enery; 'e's gone!"

The
CANADIAN MANUFACTURER
OFFICE EDITION

¶ The OFFICE EDITION of The **CANADIAN MANUFACTURER** is designed to be of value to the OWNER and MANAGER of any business; the MAN IN CHARGE of the Office Work; and to the Office Staff.

¶ It is also of value to the SUPERINTENDENT — the PRACTICAL MAN — because of the articles on COST, TIME and MANUFACTURING SYSTEMS.

¶ THE PURCHASING AGENT and the SALES MANAGER will be particularly interested by the articles on BUYING and SELLING.

Look over this issue and the force of the above statements will at once be apparent.

Canadian Manufacturer Pub. Co.
McKinnon Building TORONTO



The Experience is in the Tank

Trust your films
and plates to
TANK
DEVELOPMENT

You'll get better pictures than by the old methods, to say nothing of the freedom from dark-room worries and bother.

KODAK FILM TANKS, for use with Kodak and Brownie Film Cartridges, \$3.00 to \$7.50. No Dark-Room.

BROWNIE DEVELOPING BOXES, for use with 2¼ x 2¼ and 2¼ x 3¼ Brownie Film Cartridges, \$1.00. No Dark-Room.

PREMO FILM PACK TANKS, for use with Premo Film Packs, \$3.50 and \$4.00. Dark-Room for loading only.

EASTMAN PLATE TANKS, for use with glass plates, \$3.50 and \$4.50. Dark-Room for loading only.

Canadian Kodak Co., Limited
TORONTO, CAN.

Free Booklet on Tank Development at the dealers or by mail.

THE MERCHANTS BANK

OF CANADA

Issues Letters of Credit

To Travellers, Available in All Parts of the World

MAIN OFFICE: Corner St. James and St. Peter Streets.

CITY BRANCHES: 1255 St. Catherine Street East. 320 St. Catherine Street West, cor. University. 1330 St. Lawrence Boulevard, and Town of St. Louis.

OSCAR HUDSON & CO.
CHARTERED ACCOUNTANTS
AND BUSINESS SYSTEMATIZERS

5 King St. West
TORONTO

JENKINS & HARDY

Thos. Jenkins, F.C.A. (Can.)
Jas. Hardy, F.C.A. (Can. and Ont.)

Established 1857

Chartered Accountants and Estate Agents
151 TORONTO ST.

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GLOBE TIME RECORDERS

Rapid — Durable — Legible — Reliable

Register consecutively on the one sheet in clear type to the minute. No Keys. No Cards. No Checks. No Pin-holes. No Lines.

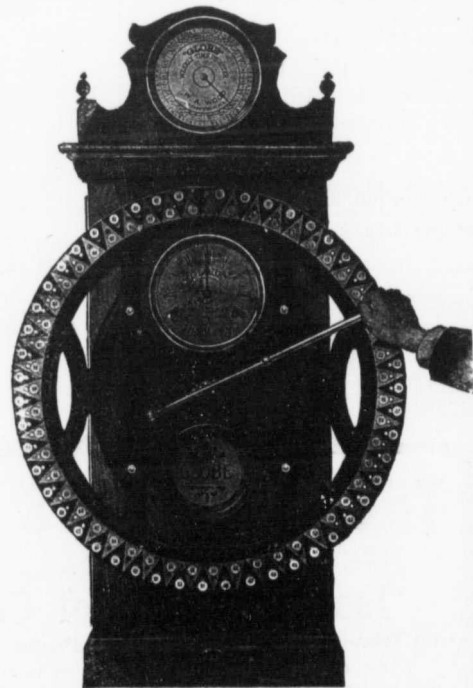
YOUR payroll is the largest single item expenditure in your establishment and is the one expenditure most profitable to keep a good check on. ¶ You are buying this labor every day, every week, every year. Are you getting all that you pay for? The experience of many firms is that before they had a good mechanical time register, they did not. ¶ We can reduce your payroll by compelling employees to be on time and to work until quitting time. We show you the exact time your employees arrive and depart, and do it in clear, legible TYPE to the MINUTE. ¶ It enforces punctuality and eliminates all time disputes. The machine shows no partiality. These machines, made in Montreal by W. A. Wood, have stood the test for years and many firms throughout the country cheerfully recommend them. We have saved them money; we can do the same for you. ¶ Let us have your time-keeping particulars, i.e., hours of labor, your pay periods, number of employees, and we will submit specimen sheet from the machine best suited for your requirements. Our experience in this line is at your service.

HEAD OFFICE AND FACTORY:

W. A. WOOD, 15 Bleury St., Montreal

SALES OFFICES:

Ontario—D. Fleming, 116 Stair Bldg., Toronto
Manitoba—F. H. Brydges & Son, Northern Bank Bldg., Winnipeg
British Columbia—Frank Darling, Molson's Bank Bldg., Vancouver
New Brunswick—Tilley & Fairweather, St. John



PRINTING PLATES THAT DO PRINT



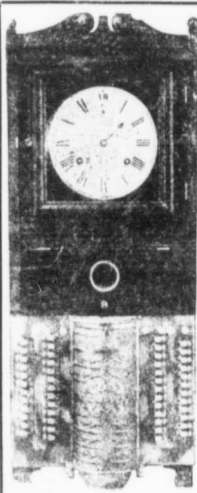
FOR
PRINTERS
FOR
THOSE WHO
GO TO
PRINTERS

PRICES:—
LOWER THAN YOU
MIGHT EXPECT.
QUALITY:—
HIGHER.

LEGG BROS.

MASTERS-OF-THE-PHOTO-ENGRAVING
— ART —

OUR SHOP IS AT
NO. 5 JORDAN ST.
TORONTO.



The "Simplex" Makes Men Careful About Getting to Work ON TIME

Start recording the time that every man in your shop gets to work and note the good effect. Where there is no "time system" men get careless, and from 5 to 15 minutes late is a frequent occurrence. Fact is, without knowing the time men lose you pay for the time they don't work.

THE "SIMPLEX" TIME RECORDER

records (by the simple push on a button) the exact time of every man in every department where there is a Recorder. If your shop force numbers between 50 to 100 people one Recorder will probably answer requirements. Some concerns are using as many as 100 of our Recorders. The "Simplex" is the only Recorder on which an unlimited number of registrations can be made by an employe, with absolutely no setting of the Recorder for "in" or "out." The "Simplex" is simple, practical and durable. It will last a life time.

Made in 3 Sizes—for 30, 50 and 100 People

ANY RESPONSIBLE CONCERN MAY HAVE A "SIMPLEX" ON PRACTICAL TRIAL

You ought to have our latest booklet entitled "The Timekeeper." May we send it?

SIMPLICITY ACCURACY RAPIDITY LEGIBILITY

TENS OF THOUSANDS ARE IN CONSTANT USE. NOT ONE HAS EVER COME BACK FOR REPAIRS.

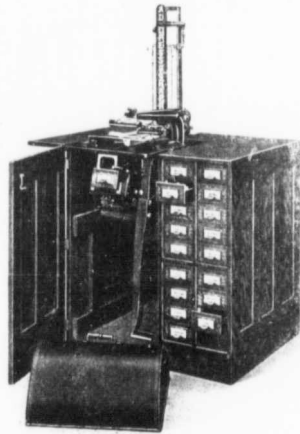
51 Victoria Sq. **MUNDERLOH & CO. MONTREAL**

THE ADDRESSOGRAPH WILL ONLY COST YOU TWO CENTS A YEAR PER CUSTOMER.

One of our customers adopted the system and installed an Addressograph three years ago. His saving is over \$7,000.00 a year.

We do not know just exactly what **you** could save with an Addressograph it depends on your business and your system, and the amount of work you can give it to do—but we **do** know the Addressograph will save money for you—we **do** know it will pay for itself in a few months—we **do** know over 30,000 business concerns already use it.

Won't you be the next firm to take advantage of the Addressograph—won't you let it help you to save time, trouble, mistakes and money? It can be used in all departments of a business concern with immense advantages.



The Card-Index Addressograph 3000 per hour

Combines all the features of a complete card index and a perfect Addressing machine. **Addresses** Envelopes, Tags, Statements, Wrappers, etc., at the rate of 3,000 per hour.

Fills names in imitation typewritten letters, mimeograph or neostyle work, pay sheets, time clock cards, time tickets, pay envelopes, etc.

Reference cards have ample room for rating, prices, terms, etc.

The address plates are transferred without handling from the drawer to the magazine on the machine, and after addressing return automatically to the same drawer (placed under the machine) in their original order.

30,000 Machines in use. Write for Catalogue and Sample Plates.

ADDRESSOGRAPH COMPANY

868 City Hall Avenue - MONTREAL, Quebec