

MACHINE METHODS OF ACCOUNTING

OTHER INTERNATIONAL PRODUCTS

INTERNATIONAL BUSINESS MACHINES CORPORATION is the outstanding manufacturer of business machines, with a record of a half-century of constant growth and world-wide expansion. Its products constitute a widely diversified range of mechanical devices which have been of tremendous value to both small and large businesses in all lines of activity—retail, large scale distribution, extractive and manufacturing industries, and governments. The products group themselves naturally into four major classifications: electric bookkeeping and accounting machines, weighing devices, writing and communication devices, and time recording and signaling equipment.

All the phases of business lend themselves readily to measurement and analysis by one or more International products. Control, which is the watchword of modern business, is effectively attained through scientific management based upon an adequate knowledge of figure-facts. The measure of control achieved in current large-scale production and distribution has increased in almost direct proportion to the development of mechanical devices which have made timely analysis of figure-facts possible.

International Electric Bookkeeping and Accounting Machines are devices employed for the automatic handling of accounting and statistical data. The process of operation, known as the Electric Accounting Method, comprises the use of tabulating cards—which constitute the basis of the method and on which all information is recorded in the form of punched holes—together with the electrical equipment which handles the cards in progressive stages until final results have been achieved.

The value of International Electric Bookkeeping and Accounting Machines lies in their speed, their flexibility in handling accounting and statistical data, their accuracy, and their ability to accomplish results at much less cost than that entailed when identical work is manually performed.

International Time Recorders and Electric Time Systems are used by every kind of industrial organization, business, and institution throughout the world—wherever time is indicated, measured, and recorded. Since 1888, when this company developed the world's first mechanical time recorder, International has

been introducing devices that increase efficiency and accuracy in time measurement.

All the various time indicating, signaling, and recording units illustrated will operate individually. Many of them are regularly operated as secondary units under the control of a master clock. An exclusive supervisory feature enables this system to maintain always-accurate time throughout an entire building.

The products in the International Scale group consist of a great variety of industrial scales, of both general and special types, which meet an extremely wide range of weighing and counting requirements.

When considering the purposes for which they are used, these devices may be divided into two broad classifications:

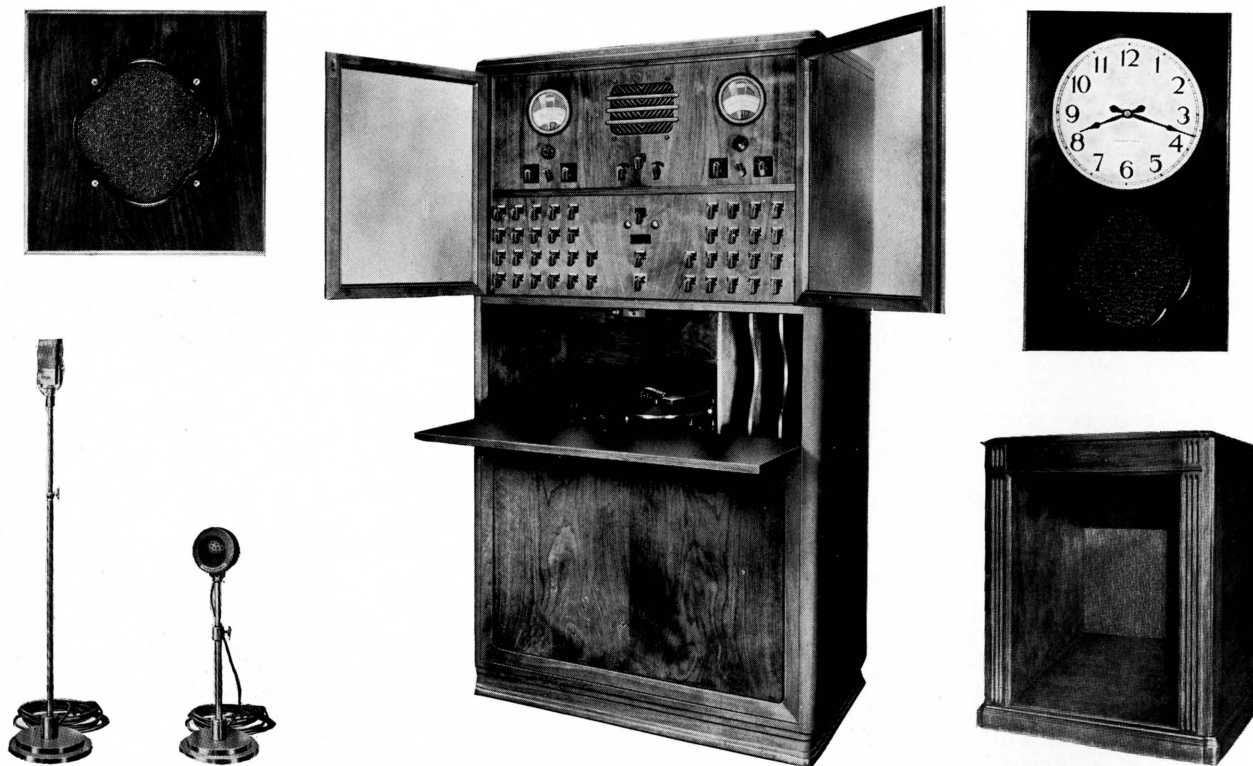
Scales employed in distribution operations: Shipping, Receiving, Transportation charges.

Scales employed in manufacturing and processing operations: Packaging, Compounding, Checking, Testing, Billing.

International Industrial Scales, like all other International Business Machines, are products of the most advanced engineering skill and manufacturing methods. Careful design and construction are combined with the highest quality of material and workmanship to give these accurate scales a long useful life.

International Electric Writing Machines are all-electric. They bring the advantages of electric power to the task of writing. Carriage return, front spacing, back spacing, type shift, line spacing, and all type bar actuation are controlled by a feather-light touch. Operators develop a smooth, swift typing rhythm which reduces fatigue and increases typing production as much as fifty percent. The patented power stroke adjustment of the International Electric Writing Machine assures ideal printing results.

There are International Electric Writing Machines for every office need. These include standard machines for general correspondence, bill-writing machines for continuous forms work, stencil-writing machines, long carriage machines, front-feed machines, and carbon ribbon-writing machines for photographic reproduction and direct-to-plate work.



SOUND DISTRIBUTION SYSTEMS

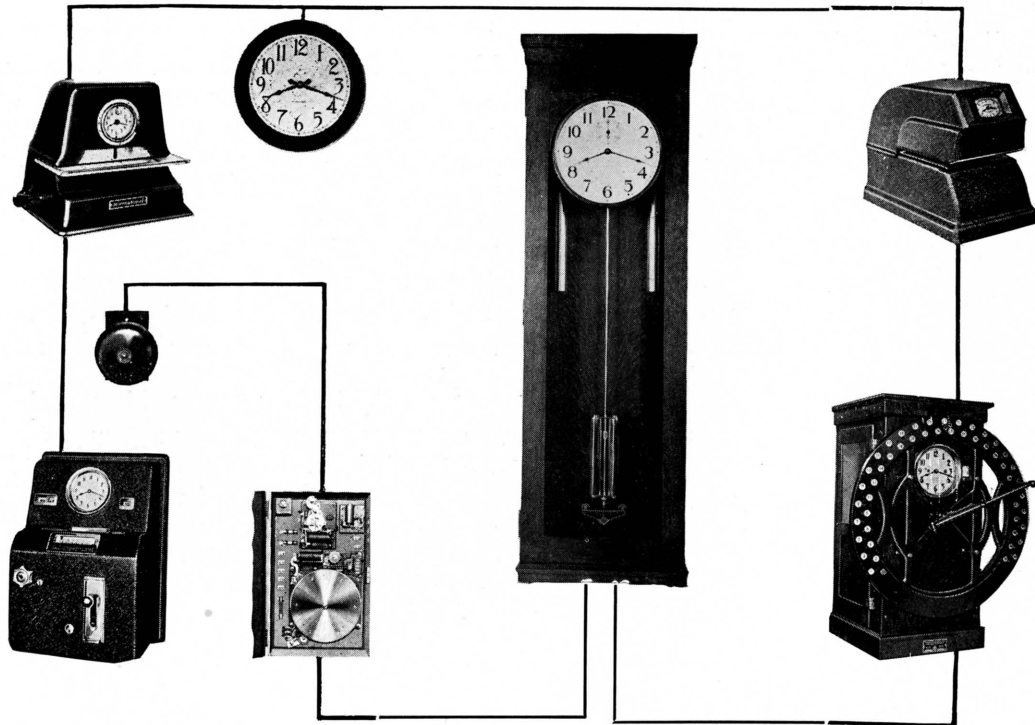
INTERNATIONAL Sound Systems provide for the controlled amplification and distribution of radio, microphone, and phonograph programs. All the sound sources are conveniently assembled in cabinets together with the equipment necessary for central control operation.

Programs are selected and sent out at will to any one or all rooms equipped with sound reproducers. Sound is reproduced entirely with undistorted clarity and fidelity.

These systems, varying according to individual requirements, are furnished in a wide variety of portable and stationary models. They are applicable to the administration, communication, and entertainment needs of business; formal education; commercialized recreation; religion; medicine; and those of all other fields where people are assembled in groups to be entertained, instructed, directed, or given information.

When equipped for Return Speech, two-way voice communication is provided between the central control station and any permanent field sound reproducer in the system.

Simplified operation is a feature of this equipment.

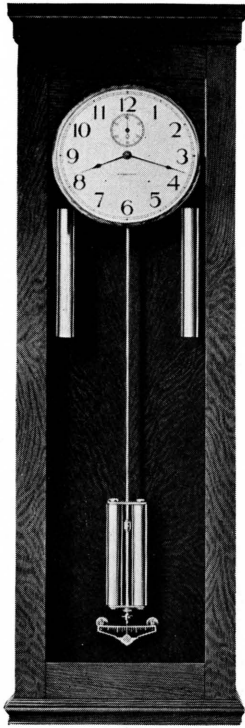


SELF-REGULATING ELECTRIC TIME SYSTEM

THE International Self-Regulating Electric Time System is the most dependable means of maintaining uniform, accurate time throughout a building or group of buildings. Any number or combination of time-indicating, recording, and signaling devices are operated and controlled by one Master Clock which furnishes the time and supervision for the entire system.

A patented, exclusive feature causes all the time units to compare themselves with the Master Clock once every hour. If by accident any unit has gotten "out of step," correction is made before the next hour begins, thus completely eliminating the manual regulation and "step-ladder" maintenance common to ordinary electric clock systems.

International systems give satisfactory service wherever uniform time is essential to efficient and profitable operation.



MASTER CLOCK

THE International Master Clock is the controlling center of a Self-Regulating Electric Time System. It is the source of accurate time for the various secondary time pieces distributed throughout a building or group of buildings.

This precise master clock is the finest commercial timepiece manufactured and will rate within ten seconds a month of true time. Because of its ability to accumulate reserve power, it unfailingly maintains the "heart beats" of the system it controls—unaffected by variation of voltage or power interruptions.

Master Clocks are available in many models and in a wide variety of finishes to conform with practically any decorative or architectural scheme. In addition to the numerous wall types there is a wide selection of "grandfather clock" models.

ATTENDANCE TIME RECORDER

INTERNATIONAL Card Type Attendance Recorders are widely used by many business organizations throughout the world. The fully automatic electric machine illustrated is the most recent model.

It provides an accurate, indisputable, unchangeable attendance record on a card for each person for any pay period. It automatically selects the proper registering position for all arrivals and departures. The two-color ribbon automatically indicates all late arrivals and early departures in red. Of heavy compact construction, it incorporates new features of design in keeping with modern engineering standards.

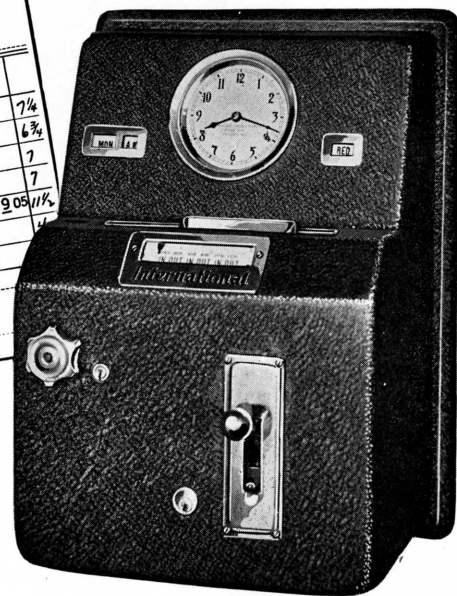
This Time Recorder may be operated individually from an electric current outlet or included as a secondary unit of the International Self-Regulating Electric Time System. Similar machines are also available in a variety of spring-driven models.

WEEK ENDING *Oct. 24*
I. T. R. Co. Form No. 1212

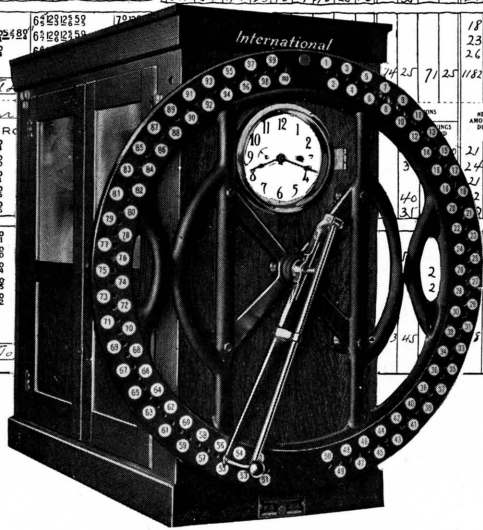
24
No. NAME J. A. RAMSEY

MORNING	NOON	NOON	NIGHT	EXTRA	EXTRA	
IN	OUT	IN	OUT	IN	OUT	
8:04	12:01	12:48	4:32			7 1/4
7:54	12:04	12:52	3:58			6 3/4
7:58	11:30	12:54	4:36			7
7:59	12:03	1:28	4:31			7
7:48	12:02	12:49	4:30	5:00	9:05	11 1/2
7:52	12:30					

TOTAL TIME *44*
RATE *.57*
TOTAL WAGES FOR WEEK *25.08*



EMPLOYEES	NO	PAY ROLL WEEK ENDING			JOB TIME	TOTAL ATTENDANCE TIME	RATE	PATROL			DEDUCTIONS		NET AMOUNT DUE	
		MON	TUES	WED				EXTENSION	ALLOWANCE	TOTAL	INSURANCE	SAVINGS FUND		
C. G. O'DONWELL	1	6:40-2:50	6:40-2:50	6:40-2:50	52	54	60	32	40	34	40	50	3 00	28 90
A. B. BROWN	2	6:40-2:50	6:40-2:50	6:40-2:50	52	54	54	29	16	1	25	20	41	30 41
L. E. CLINTON	3	6:40-2:50	6:40-2:50	6:40-2:50	44	45	56	25	20			35	1 50	22 55
A. W. TYLER	4	6:40-2:50	6:40-2:50	6:40-2:50	54	54	47	30	78			46	3 50	24 88
A. C. POWERS	5	6:40-2:50	6:40-2:50	6:40-2:50	46	47	51	24	23					24 23
F. K. DOWNS	6	6:40-2:50	6:40-2:50	6:40-2:50	52	54	44	24	46			2	50	23 96
J. G. MORPHY	7	6:40-2:50	6:40-2:50	6:40-2:50	44	44	43	21	40					20 80
R. E. ELDREDGE	8	6:40-2:50	6:40-2:50	6:40-2:50	52	54	44	23	76	1	40	25	1 60	24 81
E. M. MASON	48	6:40-2:50	6:40-2:50	6:40-2:50										18 44
B. C. DECKER	49	6:40-2:50	6:40-2:50	6:40-2:50										23 73
G. C. HARLAN	50	6:40-2:50	6:40-2:50	6:40-2:50										26 85
CHECKED BY: [Signature]													71 25	1182 09
EMPLOYEES														
J. W. KENDRICK	51	6:40-2:50	6:40-2:50	6:40-2:50										21 95
T. W. VANDOL	52	6:40-2:50	6:40-2:50	6:40-2:50										24 03
R. F. MORRIS	53	6:40-2:50	6:40-2:50	6:40-2:50										21 80
L. A. GREEN	54	6:40-2:50	6:40-2:50	6:40-2:50										22 38
G. A. McDONALD	55	6:40-2:50	6:40-2:50	6:40-2:50										21 78
CHECKED BY: [Signature]													45	5 72



AUTOMATIC PAYROLL MACHINE

THE Automatic Payroll Machine provides a record sheet on which are combined the daily registrations for all employees and payroll extensions for an entire pay period. This sheet remains inside the machine until the end of the period, when it is removed and filed as an original page in the payroll binder. Compilations are made alongside the registrations. In addition to the speed and convenience this record brings to compiling payrolls, it is always available for income tax or other legal references.

Automatic Payroll Machines are furnished in various models, covering any payroll period and in capacities of 50 and 100 employees each. They may be operated individually—with either spring or electric drives—or as secondary units in the International Self-Regulating Electric Time System.

JOB TIME RECORDER

THE purpose of an International Job Time Recorder is to furnish accurate, printed records of the start and finish of every job or operation.

The complete labor cost story, in clear, legible, indisputable figures, showing to the minute actual time spent, can be printed on any kind of job ticket or slip.

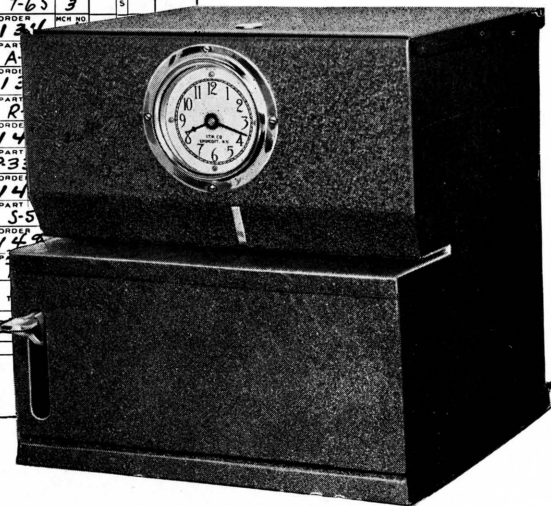
These records reveal time lost on and between jobs, render cost information immediately available, and permit a constant, day-by-day close-up of time purchases and expenditures.

Several models of International Job Time Recorders are available. The one illustrated on this page is the trigger-trip type which features one-hand electric operation. It is also available in the lever type. Both types are furnished either as individual or secondary units.



DAILY COST CARD		
No. 27	DATE 8/23	
I. T. R. Co. Form No. 6917		
NAME Joe Ralston		
JOB No.	Time	Clock Time Record
	OFF	
	ON	
	OFF	
	ON	
132	OFF	AUG 23 9.0
	ON	AUG 23 8.5
101	OFF	AUG 23 8.5
	ON	AUG 23 7.3
	OFF	AUG 23 7.3
	ON	AUG 23 4.8
	OFF	AUG 23 4.8
	ON	AUG 23 3.2

DATE <u>4/27</u>		Form No. 51847			
NAME <u>J. Carlton</u>		No. <u>10</u>			
CLOCK	TIME	ORDER	PCS	RATE	POST
£ 5 00		128	4	55	86
£ 4 30		763	3		
£ 4 30		131	4	108	84
£ 3 28		765	3		
£ 3 28		131			
£ 2 10		A			
£ 2 10		12			
£ 1 46		R			
£ 1 00		14			
£ 1 050		R3			
£ 1 050		14			
£ 9 46		S			
£ 9 46		14			
£ 8 30					
£ 8 27	£ 12 00				
IN		OUT			
REMARKS					



MODEL 700 JOB TIME RECORDER

ANOTHER type of the International line of Job Time Recorders is illustrated on this page. It is designed to bring modern, accurate cost accounting facilities within reach of the smaller organizations.

This recorder has the same high grade mechanism, the same flexibility, and prints the same kind of record as those International Job Time Recorders used where elaborate cost systems are kept.

Each workman prints his own record of starting and stopping times on all jobs. Any kind of cost card, ticket, or slip may be used without changing present forms.

This recorder, in a neat, compact metal case with durable morocco finish, may be set up for instant operation wherever there is a convenient alternating current outlet.

ELECTROPRINT TIME STAMP

THE International Electroprint leaves no chance for neglect in the handling of important papers. It speeds up routine by putting in plain type a record of the progress of paper work through office, factory, or institution.

This is a completely automatic time stamp. Registrations, made electrically by a slight touch of the finger, show the year, month, day, hour and minute, A.M. or P.M., along with department or individual's name. Interchangeable type cylinders print a wide variety of notations, such as Received, Acknowledged, Approved, etc., along with the regular registrations.

Electroprints are furnished in both push button and trigger-trip models, for operation either with an International Electric Time System, or directly from an alternating current outlet as individual units.

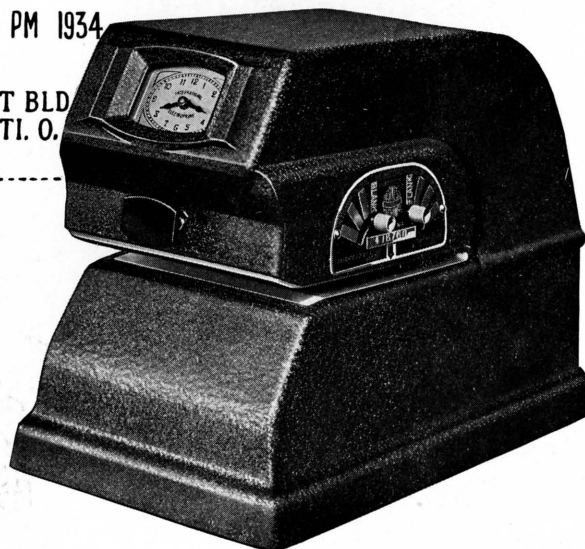
RECEIVED

COHLE & TYREE

MAR 1 2 00 PM 1934

UNION TRUST BLD
CINCINNATI. O.

BY -----





RECEIVED
VANADIUM CORP OF AMERICA

1934 MAY - 17 - PM 4 : 14

NEW YORK, N.Y.

INSTO TIME STAMP

INTERNATIONAL Insto is a time stamp that speeds up the handling of all business paper routines. Its permanent, indisputable time and identification record printed on every letter, telegram, and important document fixes responsibility for delays and neglect.

This time stamp operates automatically when a paper is inserted. There is no hammer to strike, nor button to push. Even a sheet of tissue paper is of sufficient strength to operate it, yet Insto is so ruggedly constructed that it will withstand years of heavy usage.

Paper contact operation, requiring the use of but one hand, eliminates all lost motion. Sorting and stamping may proceed simultaneously at a rate of speed that is limited only by the operator.

International Insto is furnished in models to imprint a wide variety of identifying information.

AUTOGRAPH TIME REGISTER

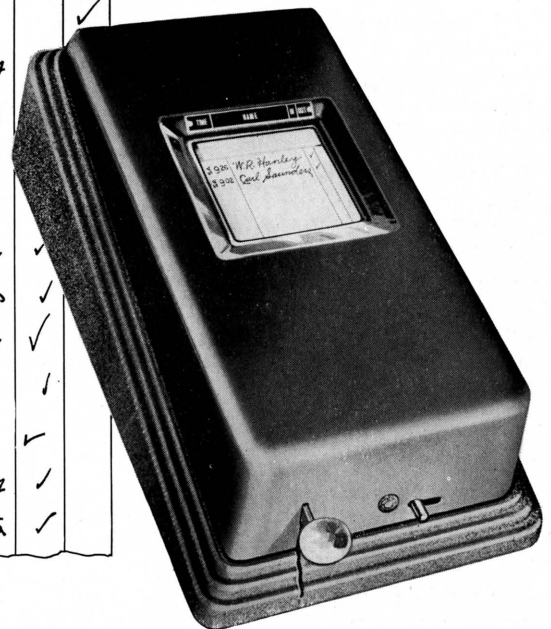
THE Autograph Time Register is a mechanical attendance recorder that combines the printed time record with personal signatures. Its operation resembles the simple signing of a book.

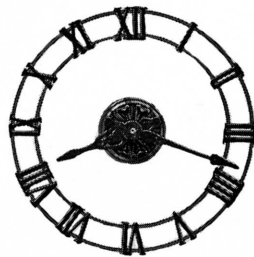
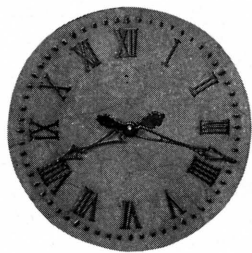
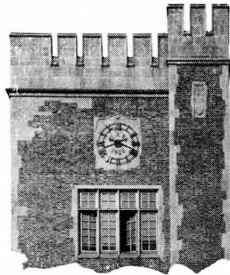
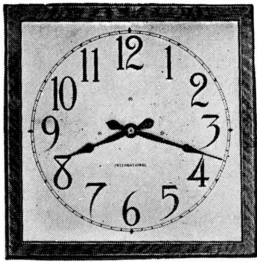
This recorder is a dignified, absolutely dependable means of supervising attendance. One person cannot register for another without detection.

Because of its flexibility it finds ready application in places where full time effort is essential to profitable operation. The uses are varied. It frequently serves as a watchman's station; as a register for office boys, messengers, or delivery men; to record entrances to and departures from bank vaults, tool or supply rooms, office buildings after hours, etc.

It is furnished in models for International Electric Time System operation or individually with either spring or electric drives.

TIME	NAME	IN	OUT
12:33	J.D. Kettleton		✓
12:25	Geo. Hayden		✓
10:58	R. B. Hill		✓
9:26	W. R. Hanley		
9:02	Carl Saunders		
9:01	Al Perry		
9:00	F. C. Kertz		
9:00	Ruth Carlton	✓	
9:00	Lucille Jones	✓	
8:59	Joe Marks	✓	
8:58	Geo. Hayden	✓	
8:58	R. B. Hill	✓	
8:51	W. R. Hanley	✓	
8:46	J. D. Kettleton	✓	





SECONDARY CLOCKS

INTERNATIONAL Secondary Clocks are designed for the purpose of furnishing a uniform distribution of time. They place accurate time wherever desired—without the bother of winding, setting, or other maintenance. Operated as units in an International Self-Regulating Electric Time System, they are automatically checked and proved at regular intervals for agreement and accuracy.

In schools, hotels, hospitals, public buildings, they are used primarily to furnish dependable time service. In business and industrial organizations they establish regularity in routines, coordinate activity, and set a gauge of progress on production schedules.

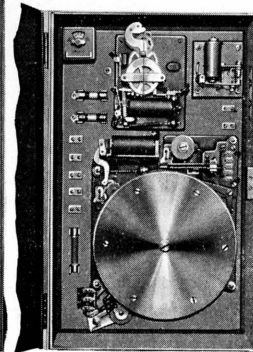
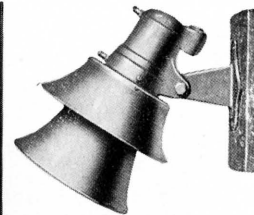
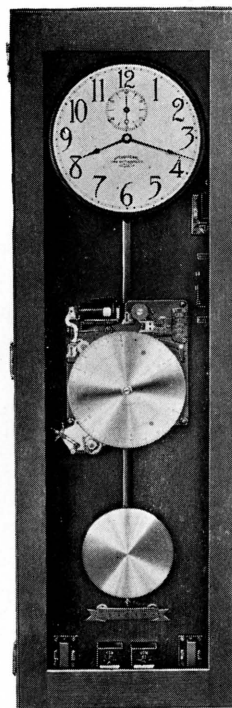
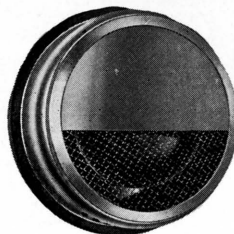
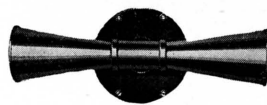
There is an International Secondary wall clock for every purpose. Many types of designs are available for selection, including various types of suspended, outdoor, and tower clocks. Special clocks may be built to suit any architectural plan.

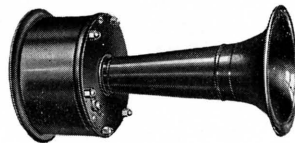
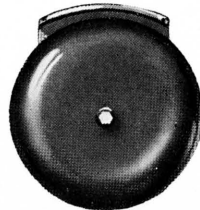
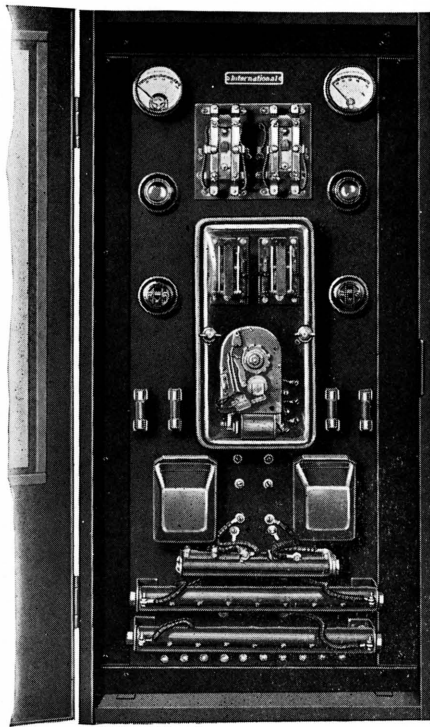
PROGRAM SIGNALING SYSTEMS

AN International Program Machine automatically *sounds* exact time for the starting and stopping of work, changing of shifts, moving of classes in schools, etc. The signals are given by means of electric bells, horns, sirens, or whistles.

This device consists of a drum, or wheel, which is slowly turned forward like the hands of a clock. The "schedule" of signals is set up by means of easily adjusted pins or lugs. A calendar device silences all signals during the night, Sundays, or any other required period.

The machines illustrated permit simultaneous operation of several different schedules, any combination of signal intervals, and any type of signal. They operate as part of an International Self-Regulating Electric Time System. A wide variety of other models is available to meet any specific requirements.





FIRE ALARM SYSTEMS

INTERNATIONAL manufactures a complete line of interior fire alarm equipment suitable for every industrial or institutional use where the utmost in protection of life and property is desired.

The latest engineering features are incorporated in these systems. They are sold and installed under the approval of the Fire Underwriters Laboratories.

Of particular interest is a new break glass station requiring no lever or hammer to break the glass. A slight blow with the hand on a metal push plate is sufficient to start an alarm—thus eliminating the danger of injuries from shattered glass.

There is a system suitable for every requirement—including all the approved circuits, whether simple or elaborate. A wide variety of fire alarm bells, horns, gongs, and other sounding devices is available.

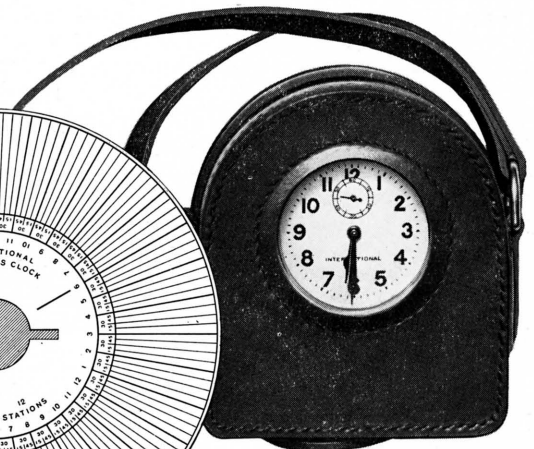
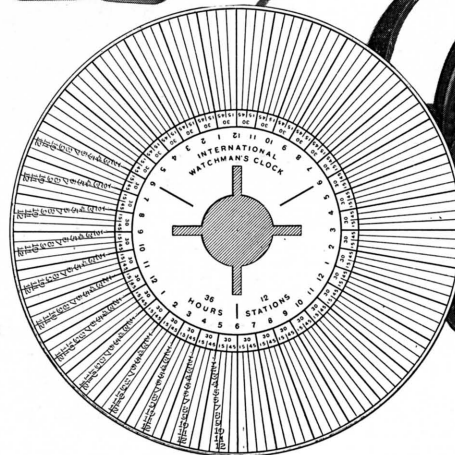
WATCHCLOCK SYSTEM

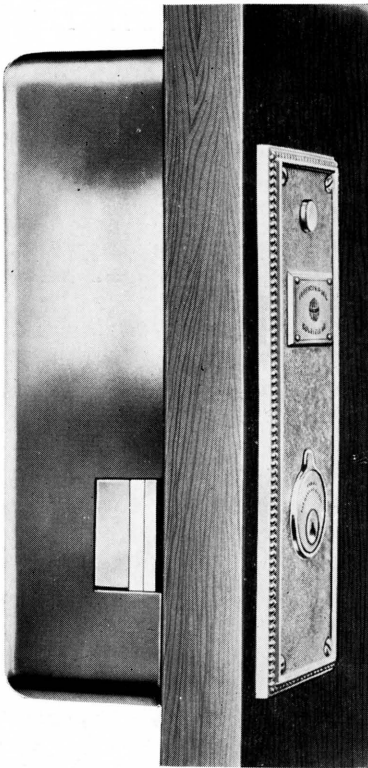
THE International Watchclock System consists of a portable recorder and stationary registering stations. Its purpose is to insure systematic, regular patrol of protected property. The recorder is carried to each station where an embossed tamper-proof record is made of the visit. Any negligence or irregularity is revealed and demands explanation.

The record has a capacity for 36 hours continuous service, permitting the clock to be loaded on Saturday and opened Monday without changing the record in the meantime.

The clock, in a durable and attractive leather case, is of special design for this particular purpose. It will furnish eight-day service when fully wound. Two models are available: one for twelve stations and one for thirty stations.

All International Watchclock Systems and equipment carry the label of approval of the National Board of Fire Underwriters.





ALM	11:02
B TU	7:23
DLTU	11:44
C W	12:25
ILW	12:25
I W	1:06
CLW	1:06
B W	7:38
ILW	11:51
I W	11:55
ILW	11:55
I TH	12:05
CLTH	12:05
D TH	8:25
ILFR	12:38
I FR	12:46
ALFR	12:48
B FR	2:07
BLFR	2:23
D FR	7:26
ILFR	7:28
I FR	7:45
CLFR	11:54
B SA	6:17
BLSU	1:23
D SU	12:23
DLSU	1:12
C M	7:37

RECORDLOCK

THE International Recordolock is a recording door lock that gives complete protection for, and greater supervision of, important doors. It gives a private, easy-to-read, printed record of who locked or unlocked the door; the time, to the minute, when the locking or unlocking occurred; whether the locking was done from the inside or outside; whether all openings were securely fastened; and the time of the supervisor's visits or watchman's rounds.

This valuable supervisory information, printed on a convenient paper tape, is immediately available to the owner. No codes nor symbols are employed and no special interpretation is required.

The Recordolock furnishes a most economical way to protect business hours, stock, and property.

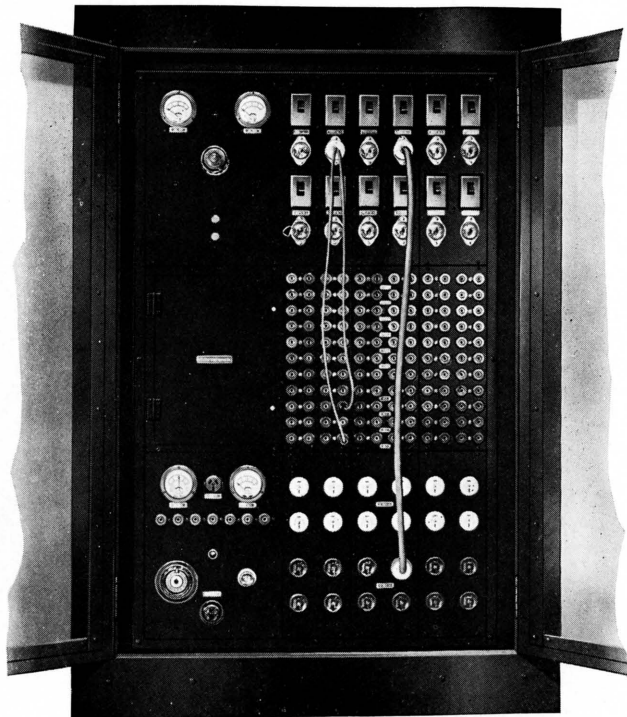
LABORATORY EXPERIMENTAL PANEL

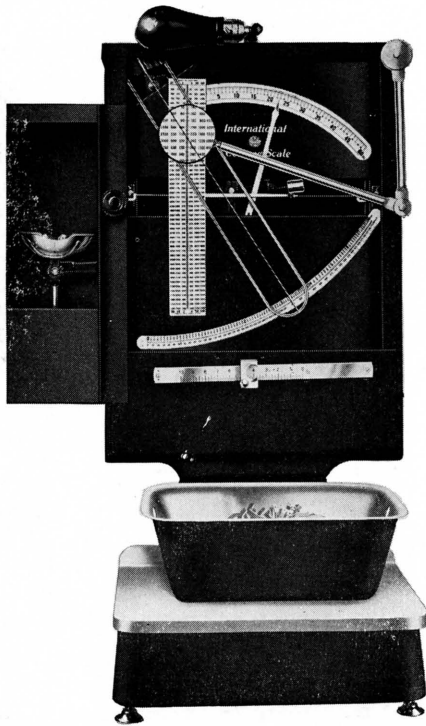
FOR use in science laboratories of business or industrial organizations, schools and colleges, International has developed a modern electrical distribution panel. Any number of different voltages, in either alternating or direct current, are made available for experimental purposes. Many experiments may be handled simultaneously regardless of the voltage required.

Special safety features are employed which protect the operator from accidental electric shocks. Danger of improper connections is entirely eliminated.

The panels, furnished in units, may be supplemented at any time by additional sections. All parts and units are accessible from the front of the board.

The company is prepared to build equipment for any special requirement.





ACCOUNTING SCALE

THIS scale has the distinction of being the only automatic counting scale that indicates in figures on a chart the number of pieces in the load.

No ratio table is needed. The operator makes no mental computations. The pieces to be counted are placed on the platform and a few similar ones in the unit pan. The count is immediately read on the counting chart. The counting operation can be further speeded by using standard unit-weight figures and properly setting the indicator on the unit-weight chart. The total weight of the counted parts is simultaneously shown with the count indication.

This device counts with equal facility pieces, yards, gallons, and other units of measurement. It is available in counter and floor models, and in various capacities.

PORTABLE SCALE

THIS type of International Industrial Scale insures accuracy and speed of weighing as well as the orderly handling and control of materials in factories, warehouses, and shipping and receiving rooms.

The mechanism is completely inclosed and protected against outside damage. The portable scale is best adapted where scales must be moved to the materials to be weighed; although installations on the floor, in pits, or directly in conveyor lines are quite general.

The sturdy cast-iron platform is supported on a full-floating, parallel link suspension lever system of the most modern design. Pivots, bearings, and all other moving parts are interchangeable, which reduces maintenance expense to a minimum.

This type is made with long or short column with the dial faced in any direction. Dial and tare beam combinations are optional within the total capacity of 1500 pounds.





PACKING HOUSE SCALE

THE Packing House Scale was designed to meet the demands of modern methods in large and small packing houses, wholesale and retail markets, laundries, commissaries, and hotels. It assures an accurate record of weights of receipts and shipments.

Being of the portable type it can be easily moved to wherever the weighing is to be done. It is a short column scale supported on a rigid pipe stand, the wheels of which can be removed. The height of the levers from the floor is regulated by the stand.

It is furnished with a standard platform and with or without a pan. When used in conjunction with a conveyor system it is supplied without the pan. Various dial and tare capacities are available to meet individual requirements.

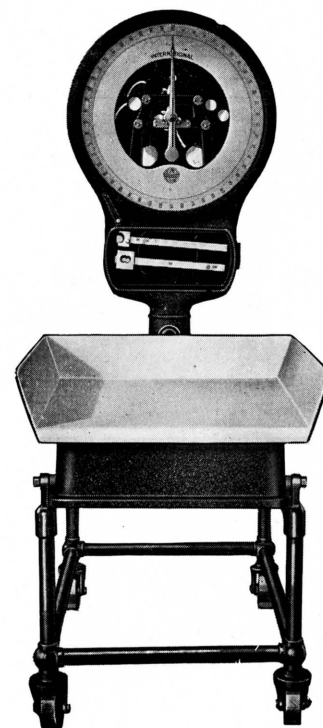
DORMANT SCALE

THE International dial scale of the dormant type automatically indicates gross and net weight of heavy drafts and assures continuous accuracy of results.

The scale is supplied in either built-in or self-contained models with various dial and beam combinations and platform sizes. These scales are installed in pits or suspended from ceilings with platforms flush with the floor to permit free movement of truckloads of material across the platform.

Lever arms are of heavy "A" frame construction guaranteed against distortion under full capacity loads. The platform is of the full-floating, parallel link suspension type affording complete protection to the carbon steel knife edges and bearings.

The Dormant Scale is furnished in various dial capacities and platform sizes to meet general requirements.





PARCEL POST SCALE

THE Parcel Post Scale is a 70-pound cylinder type scale that automatically computes and indicates the postage required on packages for mailing to any zone. It is equipped with a clearly defined, easily read chart that shows the weight as well as the postage requirement. It can also be used for general weighing and determining the weights of express shipments.

It is a dependably accurate, sensitive, and sturdy scale that guards against overpostage which means waste of money, and against underpostage which means delay and possible failure to meet delivery promises. Its indicating speed and easily read chart permit a rapid succession of weighings to be made. Confusion and delay are thus eliminated from rush hour work.

Four leveling feet are provided to correct surface variations on mailing tables. The scale is finished in dark green morocco.

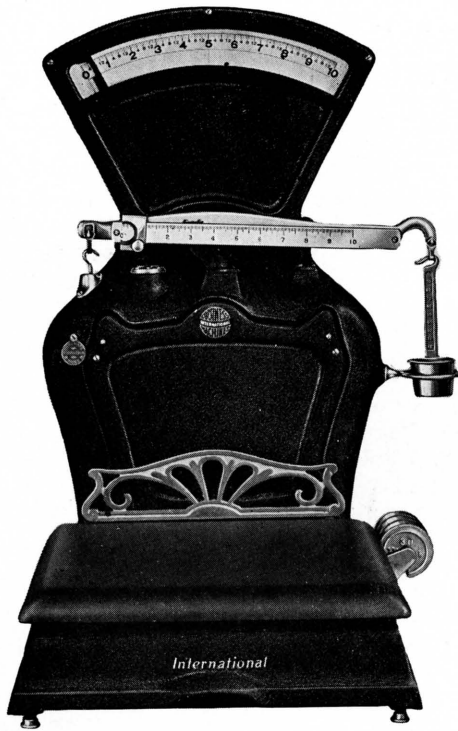
MAILING SCALE

THIS is a combination letter and parcel post scale that automatically indicates the weight and postage charges for air mail, 1st, 2nd, and 3rd class mail, and for parcel post matter to all zones. It can be adapted for use with a 20-ounce, a 3-pound, or a 5-pound chart. Two other models of larger capacities are available: one is equipped with an 8-pound and the other with a 20-pound chart.

The figures indicating the postage amounts are of such size and are so clearly defined that any reading can be made at a glance.

The accuracy of this scale not only makes its purchase possible through the actual savings effected but also protects good-will by eliminating the adverse sentiment created by underpostage.





INDUSTRIAL BENCH SCALE

THIS is an ideal weighing device for general use in factories, mills, stock rooms, and receiving and shipping departments. It is also applicable to compounding when either open or secret formulas are used; when required for the latter its tare lever and counterpoise can be completely enclosed in an aluminum housing equipped with a Yale lock. It can also be used as a ratio counting scale.

It is sturdily constructed in all respects. Full-floating suspension links and agate bearings protect the pivot knife edges on which accuracy depends. Various charts are furnished.

A few of the numerous applications to which it is adaptable are: straight weighing, checking, testing, dye mixing, compounding, inventory counting, piece-work weighing, and receiving and disbursing material in and from stores.

YIELD SCALE

THE purpose of the Yield Scale is to compute the "yield" — yards-per-pound—of rayon, cotton, silk, or other kind of piece goods material.

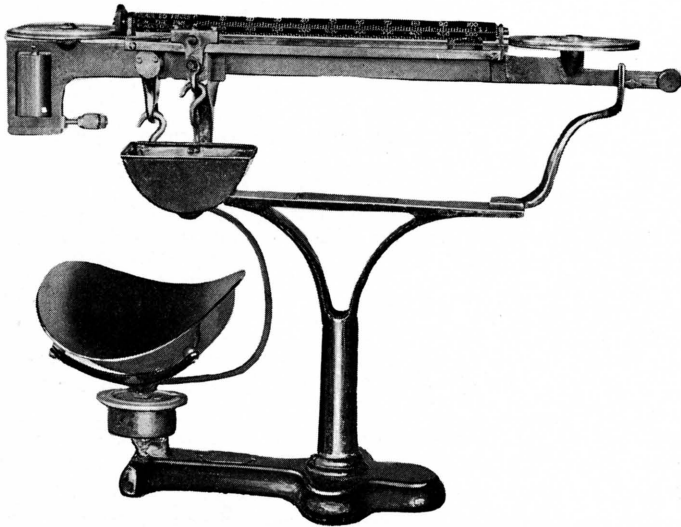
When a bolt or roll of fabric is placed on the platform the weight of the piece, its length in yards and fractions, and the yield are automatically indicated. Fabrics can be weighed and computed at the rate of 200 pieces an hour by anyone possessing but slight experience.

The scale is equipped with the Magniscope which magnifies the chart figures to four times their actual size. Total capacity is 50 pounds. A variation of this scale is used for determining the percentage of loading in piece goods material. It eliminates the use of slide rule, ratio tables, mental and written calculations.



NATIONAL COUNTING AND WEIGHING MACHINE

(Small Capacity)



THIS device belongs to the group of National Counting and Weighing Machines which are now being manufactured and distributed by the International Scale Division of International Business Machines Corporation.

The small capacity bench type illustrated is a semi-automatic machine that has been perfected for weight-counting operations to meet the practical standards of accuracy demanded by modern industry. The counting principle embodied is that of weight ratio between the unit of material in the ratio pan and the bulk of material on the platform.

Material weighing as light as $1/250$ ounce can be counted on this machine. It can be equipped to count units, dozens, or gross lots. The load capacity is 5 pounds.

NATIONAL PORTABLE COUNTING AND WEIGHING MACHINE

THE National Portable Counting and Weighing Machine is a valuable device for use in piece-work operations, for inspection and stock room records, for inventory counting, and in receiving and shipping rooms where parts must be accurately counted and weighed.

The standard model is graduated to count in units, but special machines can be furnished to count by the dozen or gross. Both the weight of a load and the number of pieces in it can be determined simultaneously. Mental and written computations are eliminated from counting operations.

The National Portable Counting and Weighing Machine is available in various models, capacities, platform sizes, equipped either with the standard ratio pan or with an extra large pan for counting bulky material. The wheelbarrow model is fitted with an incline.





STANDARD ELECTRIC WRITING MACHINE

THE International Electric Writing Machine is not an ordinary typewriter with a motor added. This machine was designed and built for power operation throughout.

Every type character on this all-electric machine receives the correct amount of pressure for ideal printing. Capitals, therefore, do not print too lightly; periods do not break through the paper.

This machine can be adjusted to print 20 distinct copies simultaneously. Still another advantage is the key-set tabular stops which enable all regular spacing for columnar work to be controlled from the keyboard.

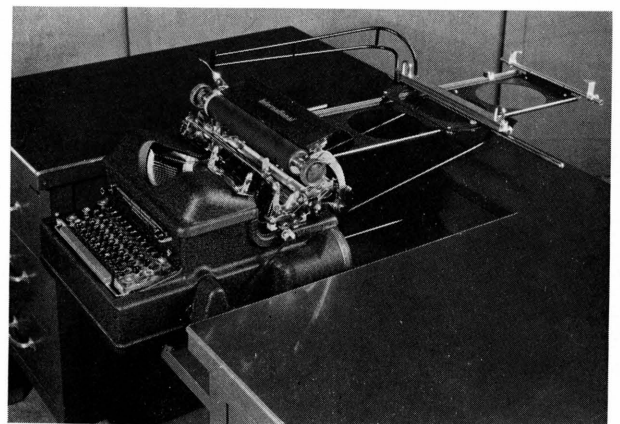
The ease of operation of this machine saves money by enabling an operator to do more attractive work in less time. Clean-cut stencils may also be written at electric typing speed.

ELECTRIC BILL WRITING MACHINE

THE International Electric Writing Machine brings the advantages of full electric operation to the preparation of bills, orders, and other routine business correspondence requiring loose or continuous forms. The forms carrier is light in weight and sturdy in construction and designed to carry all types of continuous forms. As many as twenty distinct carbon copies can be made by a feather-light touch on the keyboard of this machine.

The special platen lifting device of this all-electric machine is instantaneous in action. A light touch of the left thumb releases and operates the mechanism, removing all carbon resistance between forms when the carbons are shifted.

Other outstanding advantages of this machine include a continuous underscorer which operates automatically as long as the key is held down. There is also a repeating front spacer which makes possible a short or long jump without setting the tabular stops. The back spacer is also continuous in operation.



LONG CARRIAGE ELECTRIC WRITING MACHINES



INTERNATIONAL ELECTRIC WRITING MACHINES with long carriages are available for accounting and statistical work. The carriages are made in lengths of 16, 20, and 24 inches. The power operation of the decimal key-set tabular stops, operated from a row of twelve keys conveniently located above the keyboard, is an exclusive International advantage provided on all long carriage models.

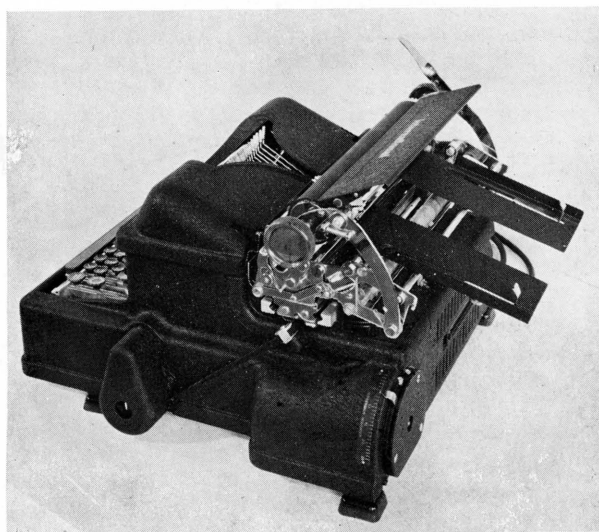
The electrically powered carriage return on these long carriage machines is a feature which operators especially appreciate. The fingertips move lightly over the keyboard of this machine—the motor does the work. This all-electric operation greatly reduces typing fatigue; it means greater accuracy and greatly increased production.

International Electric Writing Machines are provided with either gothic or typewriter type faces, in either pica or elite sizes.

FRONT FEED ELECTRIC WRITING MACHINE

THIS machine saves time in placing paper and carbons in position. It also assures the correct alignment of every sheet. All that is necessary to do is to place paper and carbonized sheets on the tray and snap down the platen. Further straightening and adjusting are unnecessary. Valuable seconds are saved on each letter.

The quick-positioning advantage of this machine also makes it ideal for tags and labels of various sizes. These small items are instantly placed and instantly removed at a touch of the finger.



PROOF MACHINE FOR BANKS



CONTROL is the keynote of the IBM Proof Machine for Banks. It brings to the check divisions a speedier and more comprehensive command of all the phases of their work, reducing the cost of the proving and distributing operations.

The Proof Machine for Banks is used to list, sort, and prove checks in the receiving tellers', mail tellers', and bookkeeping departments of a bank.

In a single operation the Proof Machine for Banks accomplishes what formerly required three separate steps. It sorts and lists checks according to banks, provides totals, and proves all checks against deposit slips.

Compactly arranged in the Proof Machine for Banks are twenty-four individual add-

ing machines and one control adding machine actuated by a ten-key adding machine keyboard, and twenty-four sorting receptacles controlled by a selection keyboard.

The following operations are simultaneously performed: checks are machine-sorted into the proper sorting receptacles; amounts are listed on the twenty-four individual adding machines using single or duplicate tapes; amounts are listed on the control tape, together with the classification symbols, in the same sequence as received from depositors.

All items are under control since the control tape furnishes a complete record for each deposit, showing the amount and classification of each check and the total of all checks in the deposit.

