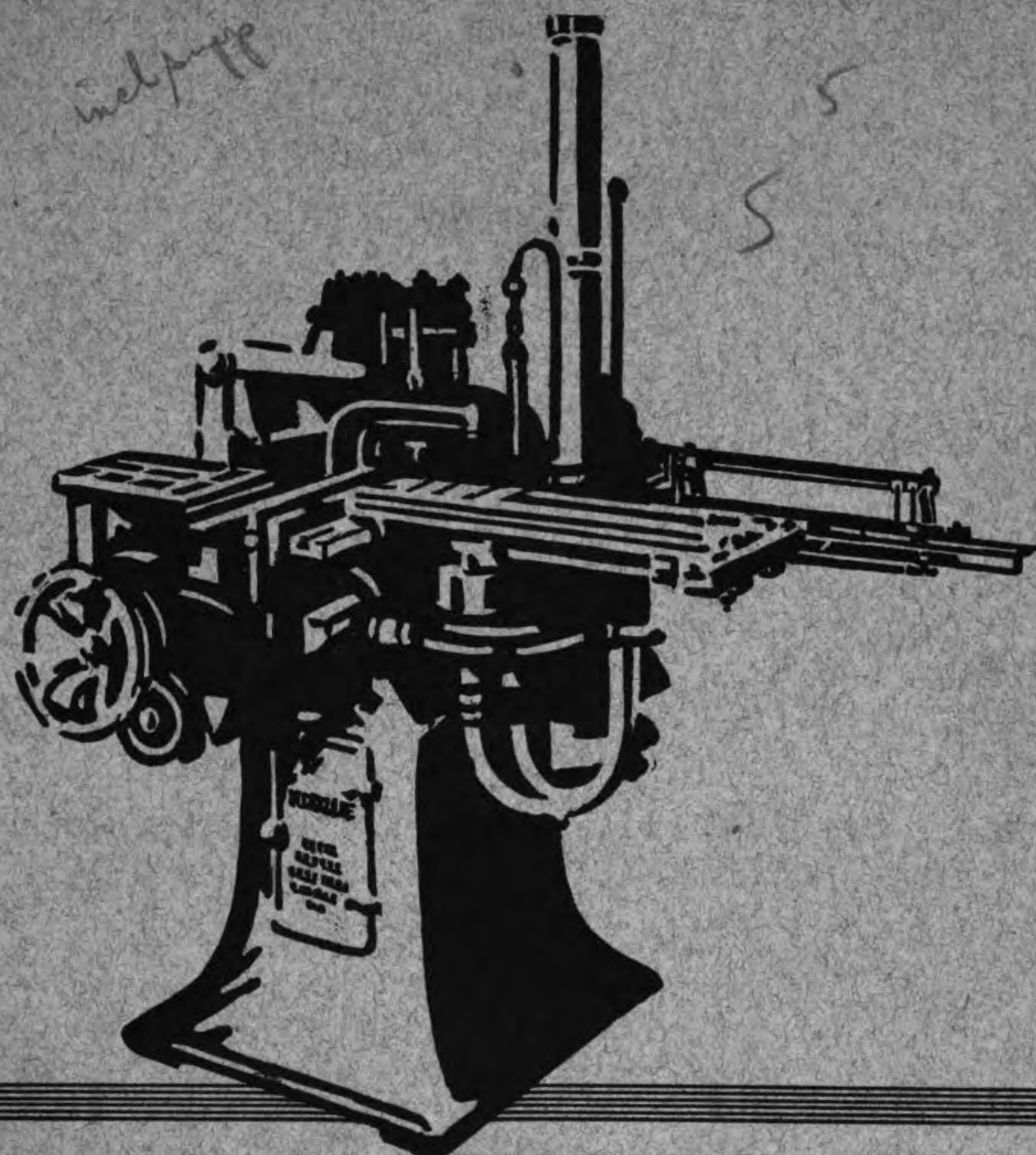


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MONOTYPE

A Journal of
Composing-Room Efficiency

Published by

Lanston Monotype Machine Company
Philadelphia

January-February Nineteen-Eighteen

Every TYPE
in "MONOTYPE"
is a MonoTYPE
TYPE

And Every Space, Quad
Lead, Rule and Slug



THIS ISSUE OF "MONOTYPE" IS
composed in our No. 172 Series. The
text is in 11-point, 9-point and 7-point,
each on one point larger body. These
sizes of the book faces are not used to
the extent their merit deserves.

MONOTYPE

A Journal of Composing-Room Efficiency

Published by LANSTON MONOTYPE MACHINE COMPANY, Philadelphia



THE WORD MONOTYPE MEANS MUCH MORE THAN THE NAME OF A MACHINE: IT INCLUDES A COMPLETE SYSTEM OF COMPOSING-ROOM EFFICIENCY BASED ON THE WORK OF THE MONOTYPE BOTH AS A COMPOSING MACHINE AND AS A TYPE-&-RULE CASTER



VOLUME 5

JANUARY-FEBRUARY, 1918

NUMBER 5

The Monotype in the Small Shop

BECAUSE the large shops are the first to adopt improved machinery and newer methods, the smaller ones sometimes get the idea that the new inventions, labor-saving machines and improved methods are not applicable to their plants and refuse to investigate.

In many cases the reason the big plant has grown to its present size is the habit of investigating new things and incorporating in its equipment everything that tends to reduce the cost of production or to increase output.

The following extract from a recent letter will give an insight into the usual state of mind of the owner of the small shop:

"Your ads in the trade journals have made quite an impression on me, and I would like to get some additional information about your machine.

"I don't know whether or not it would be practical in a shop of our size—I have always been told the Monotype was a strictly big-shop machine. We have a small shop—four jobbers—and handle a very cheap variety of work, as our stationery reveals. Our type is for the most part battered and worn, and we are constantly hunting for sorts. Much time is wasted patching up bad letters, and it seems to me our composition costs us twice as much as it should because we cannot spare time to 'throw in'—it is a constant pick, pick, pick. It is because of these conditions that I venture to write to you and ask you if you think your machine would be the solution of our difficulties.

"I am certain we could make no use of the type-setting machine, but I thought we might be able to use a casting machine."

Of course, the idea of limited use of the Monotype to the big print-shops is all wrong; it is useful in the smaller ones as well—just how small the limit may be we have not yet determined.

The Monotype Type-&-Rule Caster is just as useful, just as practical, just as valuable in the small shop as in the large, and possibly more so.

Perhaps the small plant may not have enough plain composition to keep one keyboard busy more than a small part of the time or not at all; but that is only one feature of Monotype value. Every printing plant, even the smallest, must use type, must buy type (or make it), and must have leads, slugs, rules, quads, and spaces to set with the type in making jobs. It is only a question of amounts. Practically every small plant is in the condition of that of our correspondent—insufficiently equipped with composing-room material, and paying dearly for the lack. All plants without Monotypes are paying a large price for the privilege of using old type, until, like our friend, they feel compelled to apologize for it when writing to any one who knows good type.

Now, these being facts, let us see whether we can get the small printers to view the matter in a correct light. They are continually buying type, rules, and extra sorts, picking and

distributing, and thus wasting from 30% to 40% of their total composing-room payroll. It is easy for each printer to determine what that means. With a Monotype equipment representing about the same composing-room investment and lower fixed charges, all this cost is eliminated, the payroll reduced, the output increased.

To be more definite: a composing-room having five producing employees will have an average of about one and a half times one man's time wasted in these items.

One-third of that time or one-half of one man's time would make all the material needed to keep a much larger plant running, leaving an actual saving of the time of one man, or 20% of the total time, to be sold at full price. (All velvet, to apply on cost of Monotype.)

Or put it another way: you now buy type at 50 cents per pound and pay 12 cents a pound to distribute it. You can make Monotype type for 10 cents and do not have to distribute it, besides having all you want of just the kind you want just when you want it.

Then there is a big saving in the press-room, because forms of new type can be made ready in about half the time it takes to handle the old battered stuff (more velvet). And the quality of the work is so much better that it looks worth more money and you can get a better price for it (still more velvet).

If you own a small print-shop, consider the cost of your distribution and picking (it may not be 50%, as

stated by our correspondent, but it will be high enough to surprise you) and compare the amount with the cost of a Monotype Type-&-Rule Caster and see how soon it will pay for it.

The Monotype and Non-Distribution will save these costs:

Distributing, picking, the purchase of sorts.

Twenty-five per cent. difference in depreciation as compared with bought type.

Fifty per cent. of the job press make-ready.

A good part of your electrotyping.

And still increase output in quantity and quality.

Is this not worth looking into? Can you afford to keep on in the old way?

And the above does not take into consideration the advantage of being able to keep standing any job which is likely to repeat without robbing the cases and hand-capping the regular jobs.

Send us data regarding your shop and ask us to give you more definite data suitable to your conditions.



By-product: Something produced in the course of manufacture in addition to the principal product. Monotype By-products are type, leads, slugs, rules and borders for the hand compositors. The principal product is type in lines and columns, completing the keyboard work.

How long will printers be fooled by ineffectual attempts of the slug machines to compete with the Monotype and Non-Distribution by offering something that is not even a near substitute?

There is only one real Non-Distribution and that is the Monotype Non-Distribution System.

The Commercial and Financial Chronicle

W. B. DANA CO., NEW YORK CITY

By G. F. COATES, Superintendent of the Mechanical Department

SO MANY printers claim that their proposition is different from all others that I am going to be really different and admit that the *Commercial and Financial Chronicle* is just a job of printing and requires only composition, presswork and binding, like any other newspaper or magazine, but I can truly say that system and the Monotype, which in our plant are only another name for efficiency, have enabled us to produce results that seem different and which are certainly more efficient than those secured in many other plants.

The *Chronicle* is a weekly of from 112 to 128 pages of two columns each, six and three-quarters by eleven, and 24 to 30 pages of advertising, set three columns to the page. The entire journal is set in 10-point, 8-point, 5½-point and 5-point type, principally the smaller sizes, and contains a large amount of intricate work. It must be out on time, and must be clean, readable and accurate. Besides the weekly we also publish an annual of from 400 to 500 pages and numerous supplements (almost one a week).

The type for the annual and some of the supplements is kept standing and changed from time to time, and as we print direct from the type, this shows the quality of Monotype type, as it is practically impossible to tell



MR. G. F. COATES

the old from the new, although as many as ten to twenty editions have been printed from the old.

The weekly *Chronicle* is entirely new copy and contains considerable figure and tabular matter; taking all these together, we have a big proposition and one that we could not handle without the Monotype.

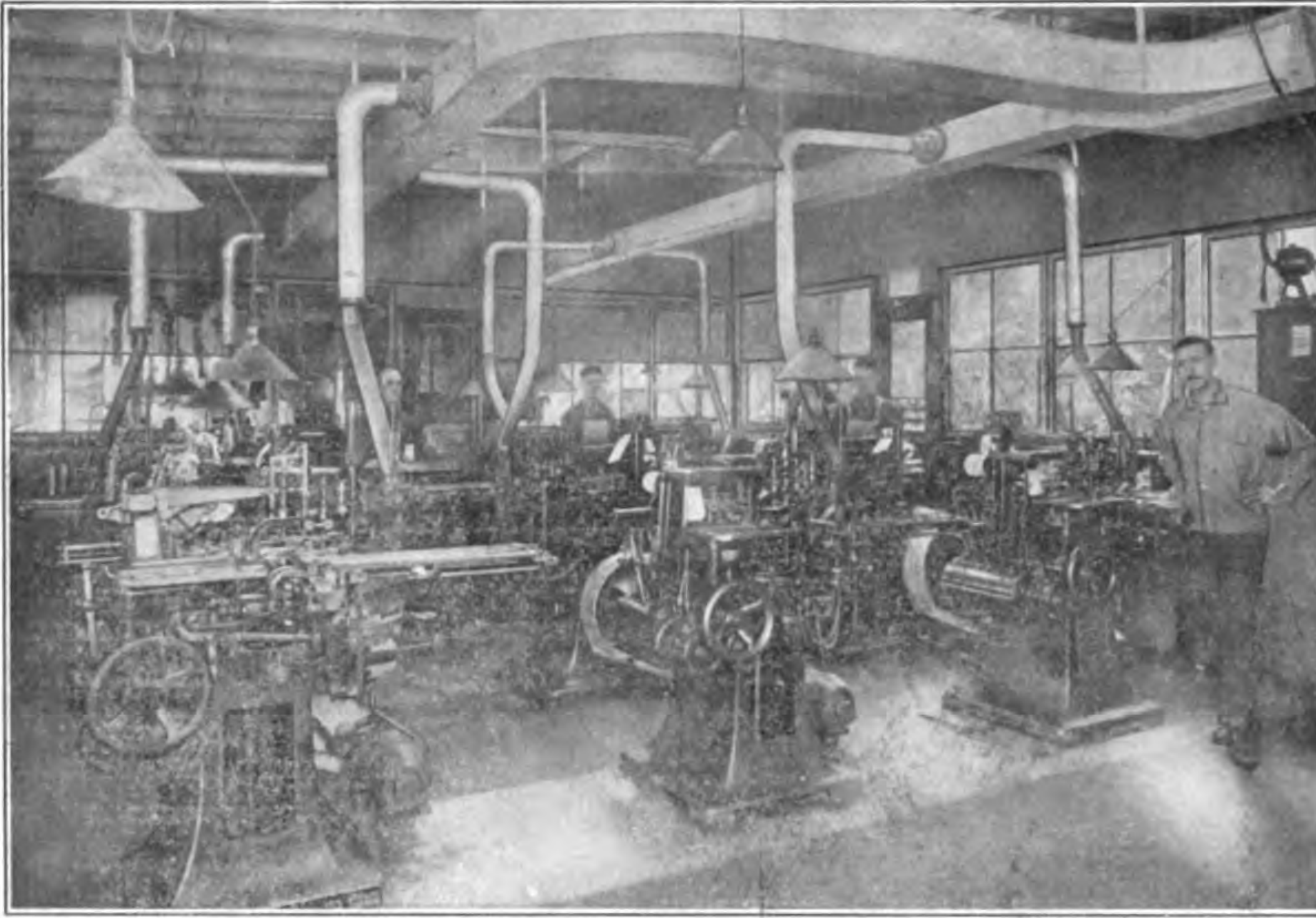
The Monotype equipment consists of seven keyboards, four of which are of the Duplex pattern, and nine casters, one of which is equipped with the Lead-and-Rule Attachment. It is needless to say that they are kept quite busy all the time.

As stated, our proposition is merely printing, or, to be more exact, a composing room; but a carefully planned system has enabled us to accomplish with ease a seemingly superhuman task. Of course, the copy comes in all through the week and is keyboarded and cast as quickly as possible and proofs sent to the editor, who frequently holds them until make-up day, which is Friday, or rather Friday night.

Now, a word about our system. All our publications are uniform in size and style, so that all material is interchangeable. The type faces are uniform and the measures regular multiples. This saves confusion and loss of time, and allows of a slight saving in holding



MONOTYPE KEYBOARD ROOM, COMMERCIAL AND FINANCIAL CHRONICLE



CASTER ROOM OF COMMERCIAL AND FINANCIAL CHRONICLE

matter from one publication for use later in the others. All our type is Monotype. We use the Non-Distribution System entirely and, after each issue is printed, we dump everything that is not marked to be kept standing. This enables us to secure a high productive percentage and keeps the office free from pi and junk.

When the operator keyboards each piece of copy, he also sets a line giving the title of the article and a number (the next in consecutive order), and these lines are cast with the matter and transferred to galleys, which thus become an index of all standing matter, new and old. Proofs of these galleys are sent to the editor, who uses them to indicate the page on which the different articles are to appear; the foreman also keeps a proof on which he marks the number of the galley shelf on which the galley will be found, and after each issue checks up the left overs and sends a new proof to the editor. By this system it is always possible to know just how much and what matter is standing, and the mechanical and editorial departments keep in touch.

Naturally, we are always striving to improve our system and many little conveniences have been added. For instance, running as many keyboards as we do and as constantly, the question of cleaning keybars was worth considering, and we constructed a little rotary brush, electrically driven, which does much better work than human hands, besides saving one-third to one-half of the time usually spent on this operation, which is so necessary in this shop, located close to the waterfront.

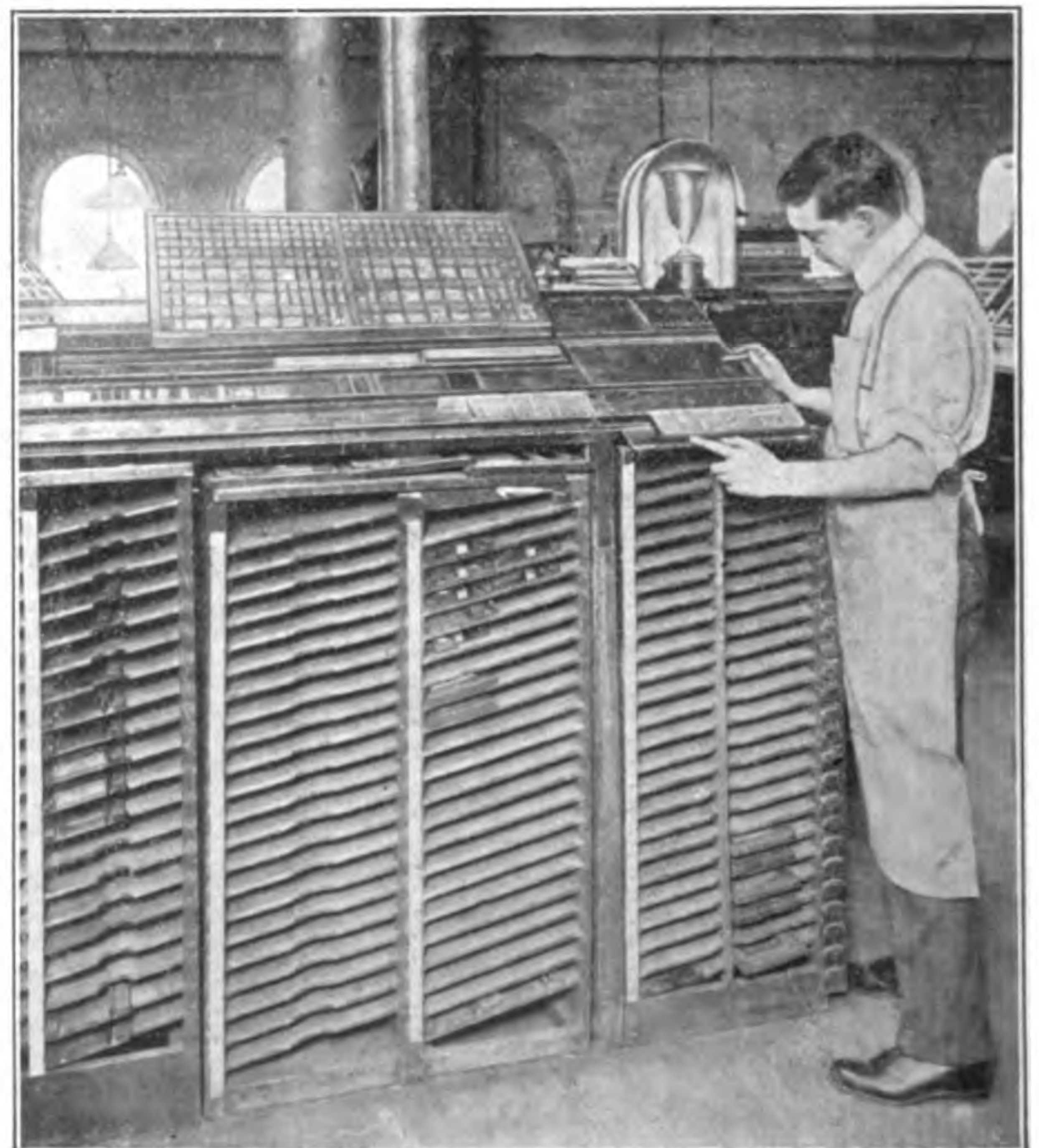
The standing pages being all of the same size, cabinets have been constructed to hold them in a very compact manner. The shelves in these cabinets are slides made of three-ply veneer and just large enough to hold one page. The cabinets are just the right height to go under the imposing-stones and thus save floor space, and are fitted with dust-tight fronts that are lifted out and set aside instead of swinging doors, which

take up too much room. The reader must remember that floor space in down-town New York comes high and plays the dickens with the expense account. Each cabinet contains six vertical rows of these slides and provides storage for 150 pages.

The keyboard room is located in a well-lighted corner of the composing room, right next to the caster room, so that no time is lost in passing the spools when the rush is on. Each operator has ample room for freedom of motion, though our photograph might give the idea of a crowded department. Among the keyboard operators here we have some of the most expert in New York, for the exacting work on the *Chronicle* could not be handled otherwise; they are J. O'Neill, C. H. Hardin, H. Fanteck, W. Lightbown, W. Douglas, J. Dur-

bin, and they are ably assisted in the handling of their large output by Messrs. Mahan, Rowland and Ezequil.

The caster room is enclosed by a glass partition, and is lighted by several windows and two skylights, thus giving it not only unusually good light but also splendid natural ventilation, but the Dana Company were not satisfied with this and have provided an excellent system of artificial ventilation which keeps the atmosphere of the caster room as clear and pleasant as the outdoor air.



IMPROVED BANK AND MAKE-UP GALLEY

This caster room is something of which the Monotype Company should be proud, for it contains nine Monotype casters with a record for efficiency and endurance.

Three of these casters were originally sent out from the Monotype factory in 1900, were repaired in 1906, after six years of hard usage, and are now producing good work on small type after eleven years' further continuous service.

Four others left the factory in 1901 and were brought up to date at the factory in 1905, and are now running on 5½-point type after twelve years of constant use.

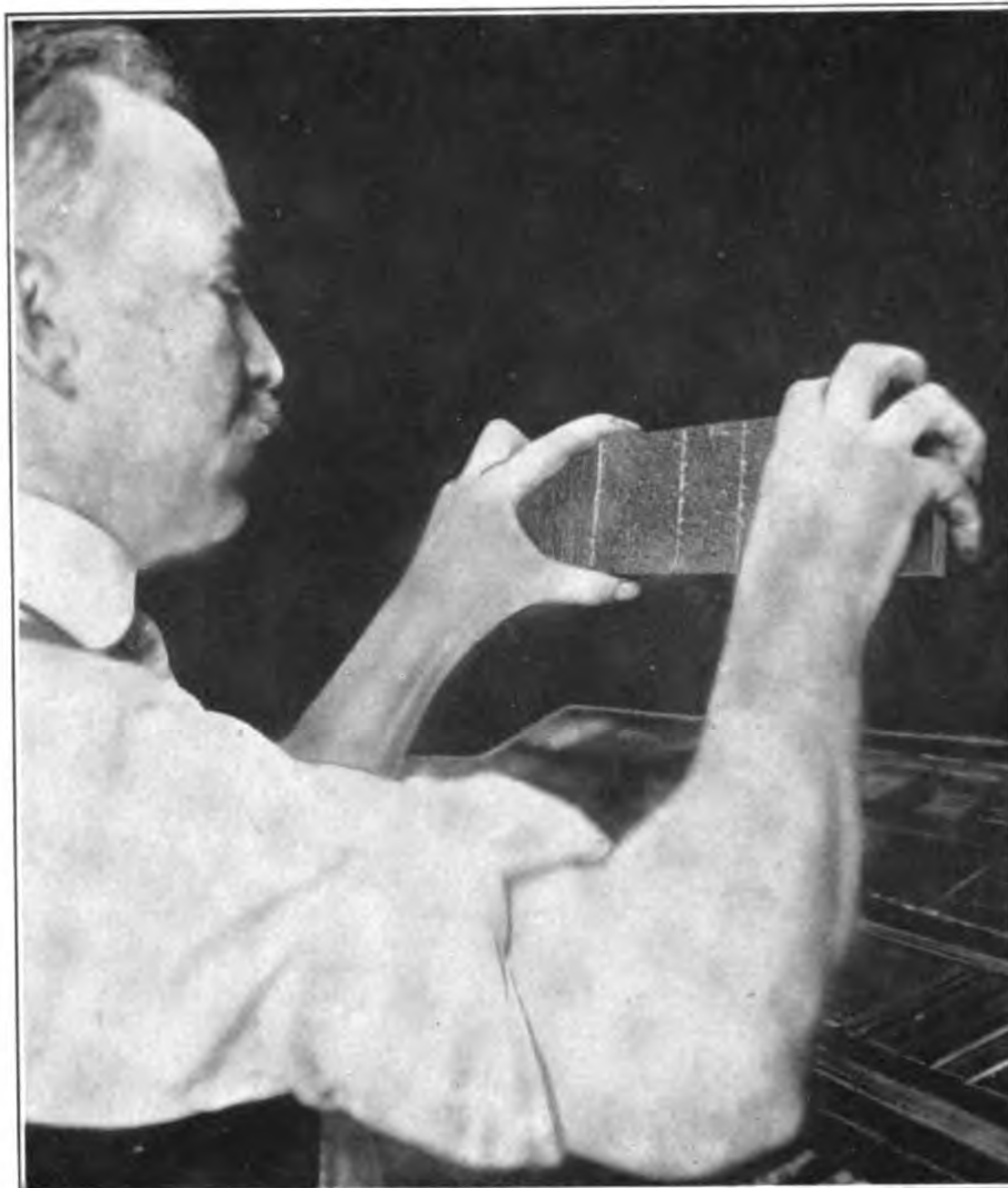
One of these, as stated above, has been supplied with the Lead-and-Rule Attachment and is now running largely on leads, slugs and rules, and casting ad type for the hand composition, for this is a strictly non-distribution shop.

But this is not all. There are two casters which were sent out from the factory in 1903 and which have not since been in the factory for repairs, and they are doing first-class work on 5- and 5½-point type every day.

This is surely some record and we are just as proud of it as I know the Monotype Company is. Of course, these machines have had the care of a really good casterman, and the new units have been added from time to time as they were perfected. At the present time they are in charge of Walter Edgar as chief operator, assisted by A. Marshall, C. Pearson and W. Underwood as runners. Mr. Edgar believes in keeping his machines in perfect condition and promptly replacing any worn part without waiting for it to give out and cause a delay.

There are a number of iron imposing surfaces, under which the storage cabinets previously described are placed, and working frames for the correctors and ad compositors. Perhaps some printers might think this active composing room a trifle crowded at first glance; there are ten regulars, including operators, and nine extras are added on Fridays, but if they could visit it on Friday night, when the weekly is being made up and everything in full swing, they would realize that there is intention and method in this close fitting, and that every man at his assigned part of the work is within reach of the next man from whom he receives or to whom he passes his work. It would then be recognized that this was part of the system which makes this plant so efficient. No confusion, no trouble, everything moving like clockwork, and the pages going to the stone at the rate of sixty per hour.

Startled you, did it? But that is just right; the weekly edition of the *Chronicle*, consisting of from 112 to 128 two-column pages, is made up in from an hour and a half to two hours every week by good team work, assisted by a make-up bank designed by the superintendent, Mr. Coates. This bank is worthy of a special description, so a photograph of it has been prepared and is presented on another page. It consists of a galley top bank under which are racks into which the galleys are placed as soon as set and corrected and the number of the rack is placed on the proof. The special feature of this make-up bank is the attachment at each



JUST A LIFT OF MONOTYPE TYPE

(See Next Page)

end for handling the galleys. At the right end, which is shown in the photograph, it will be noticed that a portion of the galley rest extends below the front edge of the bank, so that the make-up galley may be placed low enough for the second column to be slid right into position beside the first. This rest contains a series of pins against which the galley rests to position it; the first row of pins allows the galley to rest in position to receive the first column of a page; it is then raised slightly at the far edge and the pins drop and allow it to slide down to the second position against the ledge ready for the next column. When the upper galley of the bank is used, the two upper sets of pins position the galley in like manner.

This bank is really part of the system, and in use the corrected galley is placed on the rest at the left end of the bank, which is provided with a screw adjustment to take care of the variations of the galley rims so that they may be kept in line with the ledge on the bank and the matter slid off without danger of pi.

The make-up system is as follows: one man takes the first galley and places it at the left end of the bank and slides off the type marked for the page to be made up and pushes it along, taking up the next article to follow in the same manner. Another man takes this matter and divides it into approximate column lengths and roughly spaces it out. Then a third man slides it to the make-up galley and passes the page to another man for tying up and proving, after which the page goes to its allotted stone. Seen in use, this bank is a wonder for conserving labor and saving time. This team work

would prove a revelation to the ordinary make-up man, and it is carried into the lock-up as well and the forms seem fairly to jump on the stone and off again, reminding one of the famous "Finnigin" story.

You perhaps hear of the difficulty of handling Monotype type, but you ought to see the *Chronicle* compositors do it; why, they handle Monotype faster than the average newspaper man can handle slugs, and think nothing of picking up a column of five-point eleven inches long by twenty picas wide. To convince the doubting Thomases I am sending a photograph which shows a compositor handling a column fourteen inches long by twenty picas wide, using no supports and standing clear of everything while the photograph was taken. The type was not wetted before being lifted, as is usual, and no other preparation was made, as this is no stunt for the *Chronicle* men.

EDITOR'S NOTE—In preparing this story for MONOTYPE Mr. Coates has given the Monotype a boost, while keeping himself in the background, which is hardly fair to the brains and energy that he has put into the organization of the excellent system which has made the W. B. Dana Company plant so very efficient. A thorough printer himself, he has the knack of getting every one around him enthused with the idea of doing his best, and any one visiting the *Commercial and Financial Chronicle* composing room cannot help feeling the atmosphere of content and fellowship that pervades it, nor from realizing that it is a hive of industry full of busy bees. Mr. Coates is surely the right man in the right place.

A REMARKABLY LONG RUN

That long runs from Monotype type are possible and profitable no one familiar with the Monotype ever doubts. But here is a case of an extraordinary long run that is worth recording.

The story of the run is best told by the following extract from the letter received with the sample sheet (the last of a 400,000) from Mr. R. B. Summerhays, Superintendent of the Zion's Printing and Publishing Company, Independence, Mo.:

"We take it that you are interested in any unusual stunts that are done with the Monotype, and so are sending you a roll of sheets which are the last of a run of 400,000 (four hundred thousand) from one form. That is, the two rows of pages in the center were run from this form.

"The outer rows were another publication that were put with this one for the last one hundred thousand run, and you can see by comparison how much wear there is on one as compared with the other.

"When it is taken into consideration that this form was lifted and made ready five times and changed to permit other forms being printed with it, there is reason to believe that this type has been subjected to as varied uses as it is possible to apply to one form.

"We trust that what we send you will be of use in convincing some doubters that Monotype type, if made right, will stand up under severe strain."

The type naturally shows some wear, but is still in good condition and looks as if it might stand an additional run of some length. The difference between the portion which has had 400,000 impressions and that

which has had only 100,000 is very much less than would be expected and shows what good Monotype type will do in the hands of a careful pressman, and that individual deserves great credit for the result.

THE MONOTYPE ON THE PACIFIC COAST

The growing popularity of the Monotype and the increased number of Non-Distribution installations in the Western States, and especially in the Pacific Coast district, has made necessary a larger force of Monotype men to render to our Pacific Coast customers "Monotype Service." We have, therefore, placed this territory in charge of Mr. Frank L. Bowie, with headquarters in the Rialto Building, San Francisco.

This change will benefit Monotype users and make it easier for other printers to learn more about the Monotype, as Mr. Bowie has a staff of inspectors, efficiency experts and salesmen always ready to assist Monotype printers and show others how the installation of the Monotype and the Non-Distribution System will benefit them.

Distribution has cost millions of dollars and given nothing in return. Why not abolish it at once?

A CHANGE FOR BETTER SERVICE

Just after the forms of the November-December Monotype had gone to the foundry the following announcement of change in the New York-Boston District was made public. While it is no longer news, we print it here to emphasize the fact that "Monotype Service" is yours for the asking and that it is our constant aim to keep that service at the highest point of efficiency and benefit to our customers.

To better care for the great increase in business, the Lanston Monotype Machine Company announces the separation of the present New York-Boston District on November 15, 1917. The new districts will be known as the New England District and the New York District.

The New England District will be in charge of Mr. Russell L. Davis, who has been Assistant Manager at the Boston Office.

The New York District will be in charge of Mr. Richard Beresford, who has been Manager of the combined districts since November 1, 1916.

The separation of the two districts will give Mr. Davis a greater opportunity to serve our customers and care for the increased business in the New England District, as well as enable Mr. Beresford to give his undivided attention to the development of still greater business in the New York District.

P. S. Due to the fact that a number of our most valuable men have volunteered, and others have been drafted into the National Army, we ask the indulgence of our customers and friends for a short time until this abnormal condition has been adjusted.

The Monotype in the Dallas News

By H. W. MAXWELL, Foreman of the *News-Journal* Composing Room



MR. H. W. MAXWELL

SEVERAL years ago, possibly four or more, a suave gentleman called on me and stated that he represented the Lanston Monotype Machine Company and desired a few minutes of my time in which to explain the advantages of the Monotype for use in our ad-composing room.

At that time we had just purchased a complete new outfit of foundry type for the ad room and I was not keenly interested in his proposition,

but being, as my friends say, naturally good natured and tender-hearted, I gave him the opportunity.

After listening to his story of the wonderful features of the Monotype as patiently as I could, I told him to "drop around again in some other year," as I might want to talk the matter over when our new foundry type was worn out.

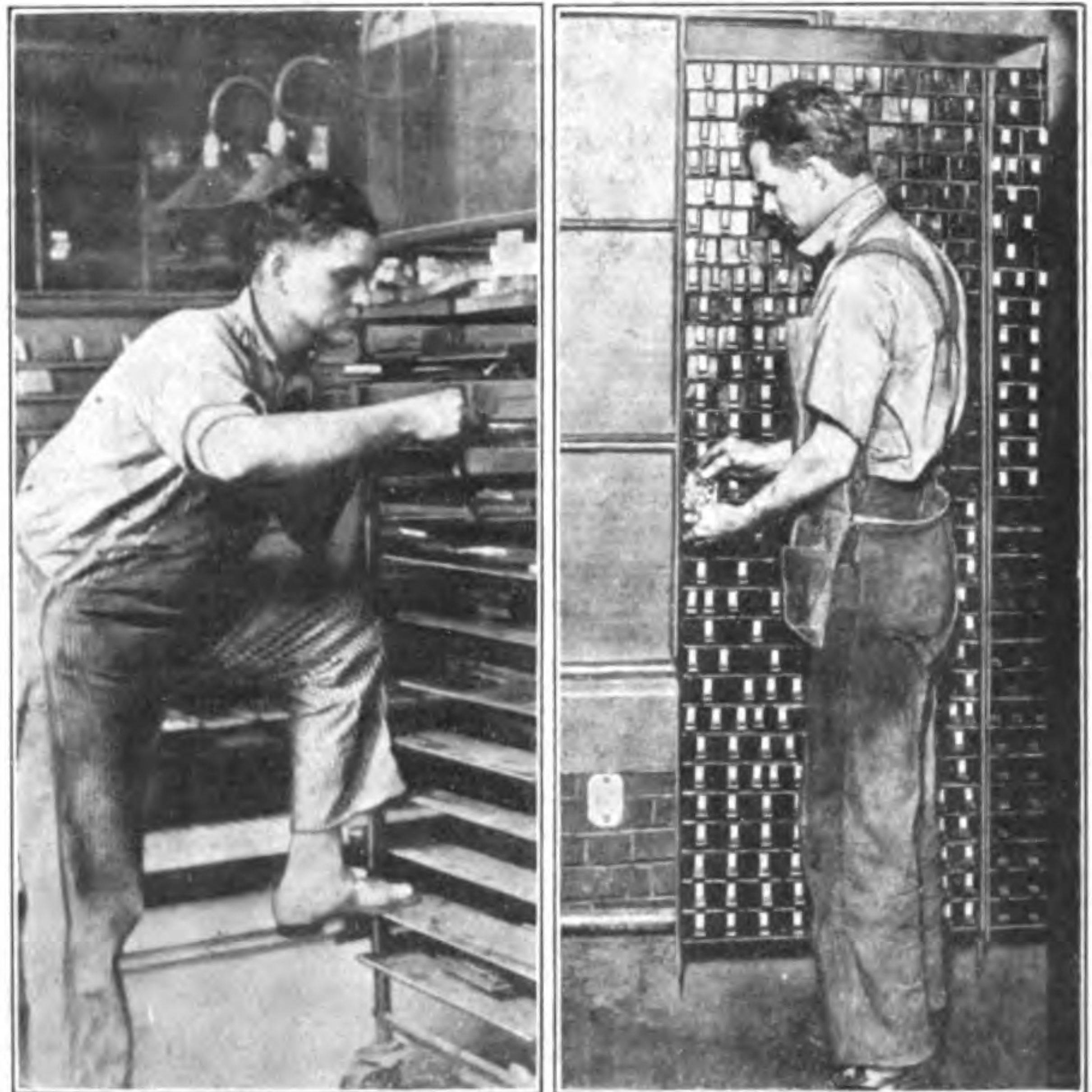
This was no ordinary salesman, however, and not so easily gotten rid of. When it comes to persistency, I might—in fact, I shall—say that he had everything

backed clear off the map. This Monotype man kept coming about once a month.

One day he told me of the Lead-and-Rule Attachment, which had just been perfected, and I at once realized its value. In my opinion the Lead-and-Rule Attachment is largely responsible for the newspaper success of the Monotype.

Then I became interested in the Non-Distribution System which was being installed in the large newspaper offices of the North and East, and made a trip especially to investigate this system.

The foremen of the ad rooms using Non-Distribution told me that it was a great time, labor and money saver; and, immediately on my return home, I made a careful estimate of the cost in our plant for distributing dead



PICKING AS IT USED TO BE SORTING UP AS IT IS

advertisements and was surprised to find that, under the Monotype Non-Distribution System, the elimination of this cost would pay for the machines in a very short time.

Again, in June, 1916, that persistent salesman showed up with his usual enthusiasm, and when he left carried with him an order for two Monotype type casters, one to be equipped with the Lead-and-Rule Attachment for casting leads, slugs, rules and base material, and both for casting type, borders and spacing material.

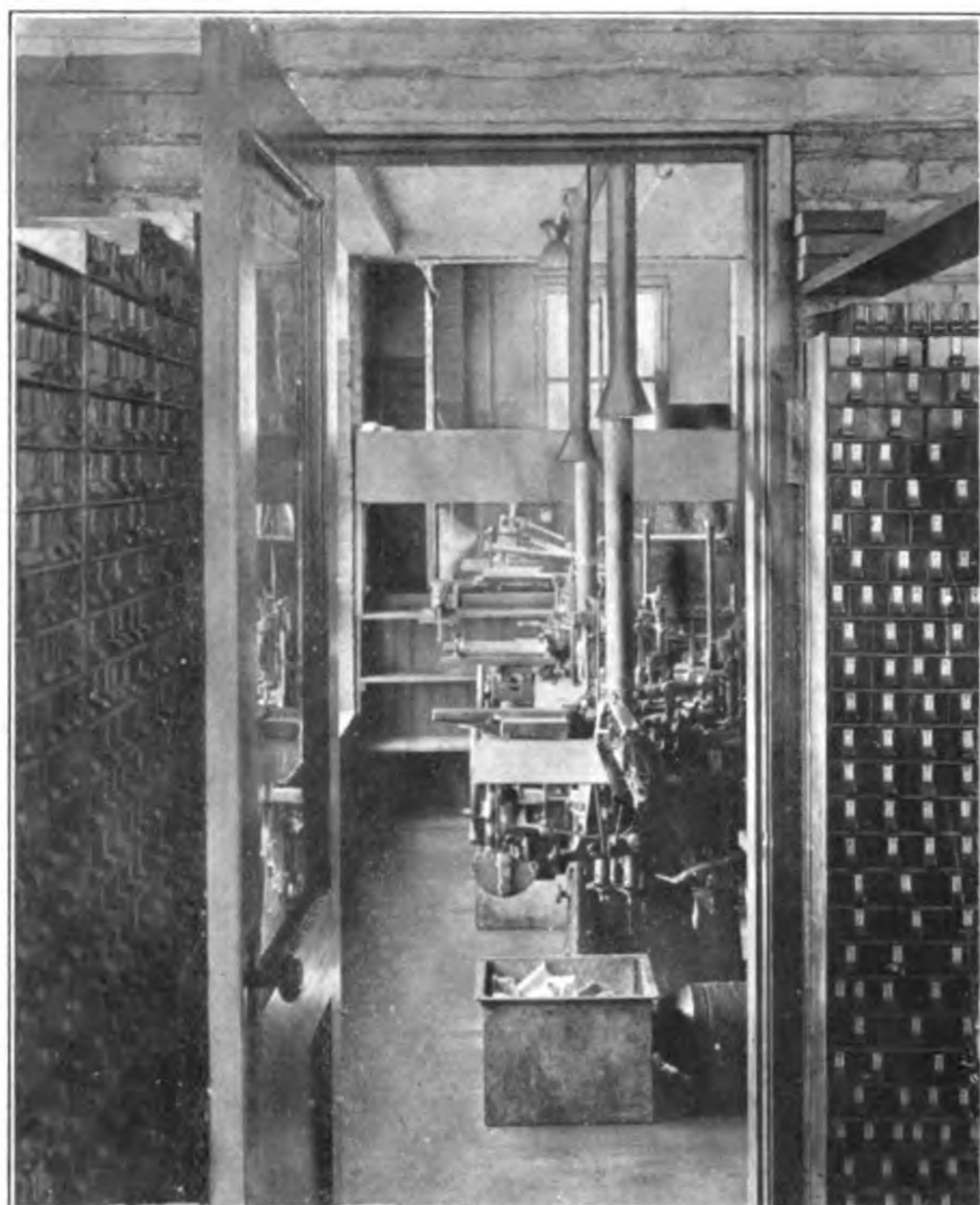
In due time these machines were placed in the *News-Journal* composing room, and we began casting Monotype and other material to replace the foundry material then in use. In a short time we had cast a supply of



MR. L. L. DANIELS
Showing the Old Way



MR. C. O. HILL
Using the Monotype Way



A GLIMPSE OF THE CASTER ROOM, DALLAS NEWS

type, leads, slugs, rules, borders, quads and spaces large enough to start the Non-Distribution System, and it was duly launched, though not without a little mis-giving as to the immediate result.

The first month's operation, however, demonstrated beyond doubt that the Monotype would exceed our greatest expectations, and although we had the privilege of a three months' trial, we purchased the machines outright after this experience with Non-Distribution.

Before we installed the Monotypes and Non-Distribution System there was always considerable time lost every night in hunting for and pulling sorts, and when we had an unusually heavy run of ads, it was necessary to pull borders and labor-saving brass material also. We now find that the Monotype Non-Distribution System completely eliminates the "lost motion" and maintains a supply of material sufficient to keep all the force productive.

The advertisers also are benefitted to an equal extent, though they did not so readily recognize it at first. We had been using several private fonts when we put the Non-Distribution into effect and had to notify them that we would be compelled to stop the use of all private fonts. We

went around and explained it to the advertising men and found that while they readily agreed that the new system would be of great advantage to the publishers, they could not see why they should do away with the private type that they had used for years in their advertisements simply to help the publishers to save a little money in the cost of distribution. They did not realize the value to them of clean, new type and all they needed of it every day, but the improved appearance of their advertisements soon convinced them, and it is safe to say that they are now well pleased.

Our workmen, too, have benefitted by the change. They no longer have to work out of dusty, dirty type cases, but have an abundance of new, clean material. From this point of view the Non-Distribution System is unusually attractive as a sanitary precaution and protection against disease.

The more we see of the system, the more convinced we are that it is the greatest improvement that has ever been made in the composing room, and in the ad-room end of a newspaper is equal to the introduction of the hot-metal composing machine in the news end.

After a year and a half of Monotype efficiency we can look back and wonder how we ever got along without it. Especially as we consider the saving of time and labor not only in the elimination of distribution, but also in sorts pulling, pi sorting, resetting lines because of lack of sorts, and the general confusion over late copy when the type was practically all up. We can surely say amen to the opinion of those foremen who told us that the Monotype Non-Distribution System is a "time, labor and money saver."

EDITOR'S NOTE—Mr. Maxwell's opinion of the Monotype is so well expressed that we have let him tell it in his own way, without a description of the *News-Journal* plant, but we are also reproducing some interesting photographs that he has had made to visualize the difference between the old method and the new, together with those showing the caster room and the composing room. In the March-April, 1917, issue of MONOTYPE we reproduced a page ad from the *Dallas News* which showed that they have real printers on their ad-room staff.



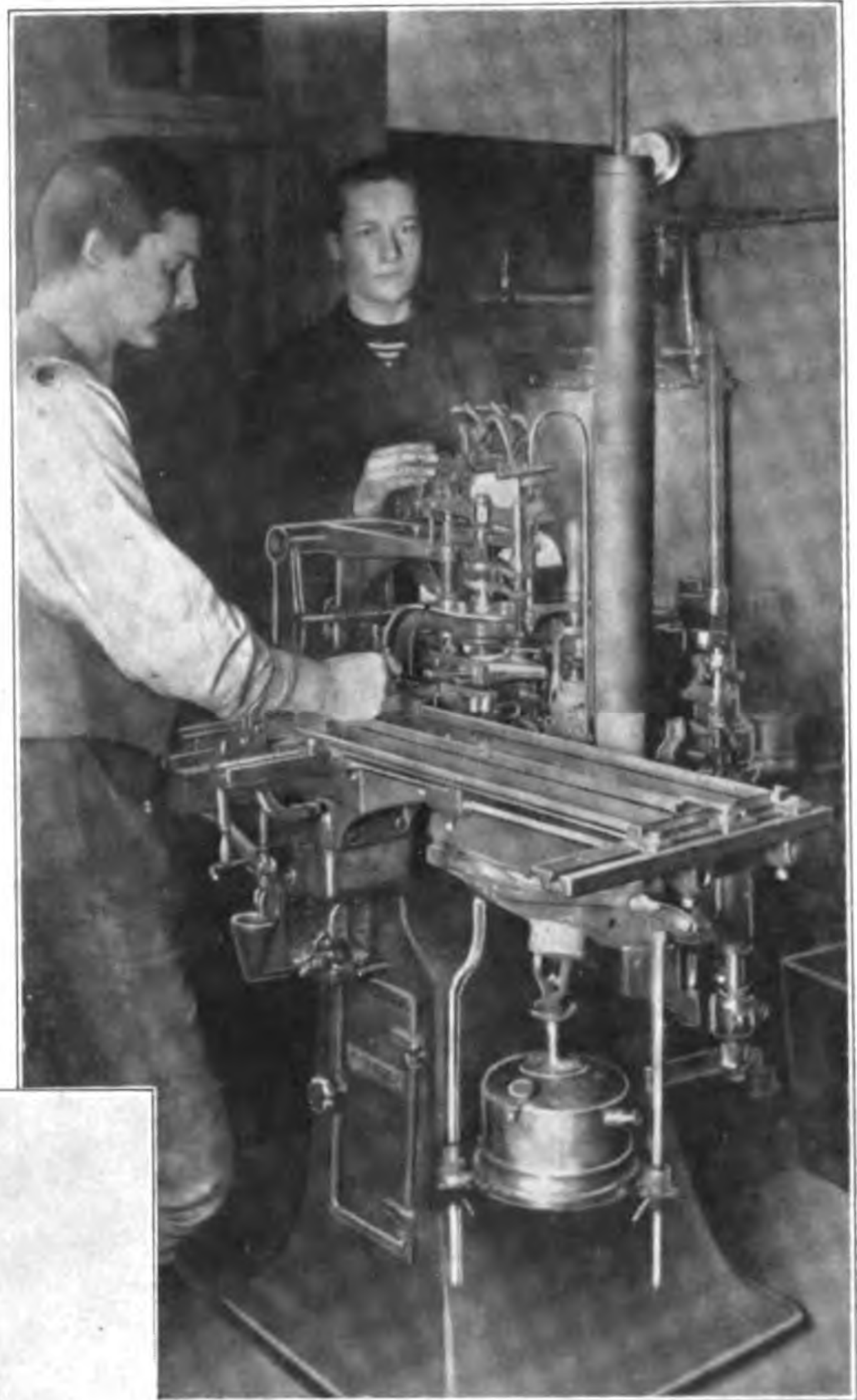
PARTIAL VIEW OF COMPOSING ROOM, DALLAS NEWS

THE MONOTYPE IN FINLAND

That neither language, nor dialect, nor distance, nor clime are barriers to the success of the Monotype most of our readers know almost as well as we do ourselves, yet there is a sensation of strangeness when we see on our desk several volumes produced on the Monotype in far-off Finland.

There are three well-printed volumes of textbooks from the press of Raittiuskansan Kirjapaino, C. Y., of Helsingfors, Finland. The composition in these books shows care throughout, as technical works should, and judging by these samples, we should say that this firm are good printers. All these books were produced on the Monotype from matrices supplied by the English Monotype Corporation, though the Lanston Monotype Machine Company can supply accents for any modern language.

Another interesting example of Monotype quality, also from Finland, is an excellently printed and splendidly bound volume of the New Testament, produced by the Suomen Kirkon Sisalahetykseuran Kirjapaino, of Sortavala, Finland. This concern is a church publishing house, and appropriately has its home in a churchlike building, as shown in the cut on this page.



MONOTYPE IN PLANT OF ISAK JULIUS, TAMPERO, FINLAND



HOME OF SUOMEN KIRKON SISALAHETYSSEURAN KIRJAPAINO

A third Finnish Monotype printer is Isak Julius, of Tampere, Finland, who does good printing and swears by the Monotype. We present small views of his caster and of his keyboard and correction rooms.

That these Finnish printers do good printing we have ocular demonstration that we wish we could show in these pages, and that the Monotype is largely responsible for the superior quality we have their word; their confidence in the machine is shown by repeat orders.

The Monotype helps the printer make good no matter where he is located; it also helps to make profits.

Company of California, in the Rialto Building, Mission and New Montgomery Streets, San Francisco, and learn about the wonderful Non-Distribution System which makes the whole plant more efficient and increases profits, and the machine which makes this possible.



A good time ticket frees the compositor from clerical work, and gives him more time to do real work. It pays to have a time ticket that gives the compositors the least to do in handling it.

Effect of Metal Price on Cost of Composition

By ELMER CHALFANT

The last two years have seen Monotype metal increase in price over 100%, and Monotype users are naturally quite anxious about the effect of this increase on the cost of their output, especially as the top price does not seem to have been reached at this time.

A few short-sighted printers have reduced the grade of metal purchased in order to secure it at their price; but that is poor policy, for two reasons: First, because good metal makes better type. Second, because it is practically impossible to prevent the poor metal from getting mixed with the other metal in stock and thus reducing the grade of the whole stock.

In consideration of the small effect on the cost of composition that even a considerable increase in the price of metal makes it is almost criminal foolishness to risk buying a cheaper grade to save a few dollars.

Even if all the present stock of metal had been purchased at the higher price, the result would not be distressing, as it will also sell for old metal at the higher price which obtains today for that commodity; while if it was bought at the lower price and only added to at the present high price, the printer is really money in pocket in case he desires to sell any part of it.

Another idea of importance is the fact that only a comparatively small part of the metal is in active use, and only the metal in active use costs anything for melting and renewal. That in standing forms and in the metal bin costs only interest and storage; but even supposing that we charge all the cost of the metal to the portion that is in active use, the cost is not great enough to worry over.

A Monotype uses from 100 to 250 pounds of metal per day, and 200 pounds would be a high average; suppose we say 1000 pounds per week. Now, allowing that the plant has five tons of metal for each machine (a very liberal allowance) and charges all the expenses against the part used actively, the total cost would be about \$400.00 per year, using ten-cent metal—\$7.75 per week, \$.00775 per pound—about eight-tenths of a cent per pound for ten-cent metal and a correspondingly higher rate for metal at a higher price.

Of course, we do not buy ten-cent metal now, so we will take the cost of twenty-cent metal, which is \$742.90 per year for the five tons with fifty-two cycles of use and melting 1000 pounds per week. This is \$14.28 per week, \$.01428 per pound, or less than one and one-half cents per pound used.

So twenty-cent metal costs just .655 of a cent (about seven-tenths of a cent) more per pound than ten-cent metal each time it is used. Let us see how this affects composition: It is generally understood that one pound of type will cover four square inches of surface; also that 1000 ems of eight-point covers 12.35 square inches and requires 3.09 pounds of type to set it. Therefore,

the difference in cost of a thousand ems of eight-point type between the ten-cent metal and the twenty-cent metal is just 2.02495 cents, or practically two cents.

Oh, yes, there is a larger investment in metal now; but do not forget that interest and all other charges in above figuring are charged on the higher basis of value. And also remember that all the metal that was bought before the rise and which is now standing did not cost that much.

It may have to be sold for much less. True! and that is one reason why every printer should have a separate metal account and not load the uncertainties of the market on his production department without reason or system.

Money is scarce at times and he pays more to get accommodation at the bank, or allows discounts to customers to force collections. Should he charge that to any working department?

Metal is money. It is the only really liquid asset that a printer has and is immediately convertible at market rates. It should, therefore, be treated as a separate account and only its use charged to the working departments—the charge being the cost of carrying only, viz.: interest, insurance, taxes and storage. The handling costs are taken care of in the departments using the metal, and consist of the melting, refining and casting into pigs ready for storage or use, together with the shrinkage or replacement of the same with temper metal.

The amount of investment in metal will vary from time to time as purchases are made or metal sold, but will average much closer than most printers seem to think, even with some of the purchases of more recent date at top price.

The following figures give an idea of the cost of carrying ten-, sixteen- and twenty-cent metal in lots of five tons and using and remelting 1000 pounds per week:

	10 cent	16 cent	20 cent
Total annual cost.	\$402.90	\$606.90	\$742.90
Cost per melting of 1000 pounds . . .	7.75	11.07	14.28
Cost per pound for each use . . . . .	.00775	.01165	.01428



We welcome suggestions for new uses of the Monotype and all that pass the acid test of real work will be passed along to other users.



“Concentrated efficiency” is the way one Monotype enthusiast speaks of the Non-Distribution System.

CHARLES M. REIN

The sudden death, on November 9, 1917, of Mr. Charles M. Rein, of the Rein Printing Company, Houston, Texas, removes from the ranks of printerdom one who has achieved much as author, editor, publisher, promoter, printer, and as a successful business man.

Born in Kenosha, Wis., in 1861, he served an apprenticeship to the machinists' trade and became a good workman, but the call of business reached him, and after several ventures, in all of which he was successful, he removed to Houston about twenty-five years ago and became interested in the *Houston Daily Age*. A few years later he went to Orange and became editor and



MR. CHARLES M. REIN

publisher of the *Orange Daily Tribune and Weekly Leader*. Here he gave rein to his poetic temperament and produced and published some delightful verses in lighter vein as well as some more serious, such as the poem on "Fate," from which we quote:

Is it fate that carries us blindly along,
 With no thought our own wishes to fill?
 Is it fate, that great force with powers so strong,
 That makes us obey its stern will?
 Is it fate that makes presidents, paupers and slaves,
 Tossing men on its capricious breast?
 Is it fate that denies man the pleasure he craves,
 And keeps him in eternal unrest?

Returning to Houston, he established the Rein Printing Company in 1905, and by his successful career improved the sentiment expressed in his poem.

He was one of the pioneer users of Monotypes in Texas, and has always been an enthusiast in regard to its work and possibilities, his early mechanical training making him appreciate its excellence.

He is survived by a widow and two sons, Harold and Ronald, who will continue the business of the Rein Printing Company.



Specify Monotype when buying composition. When the job is finished, you will have a better job at less total cost.



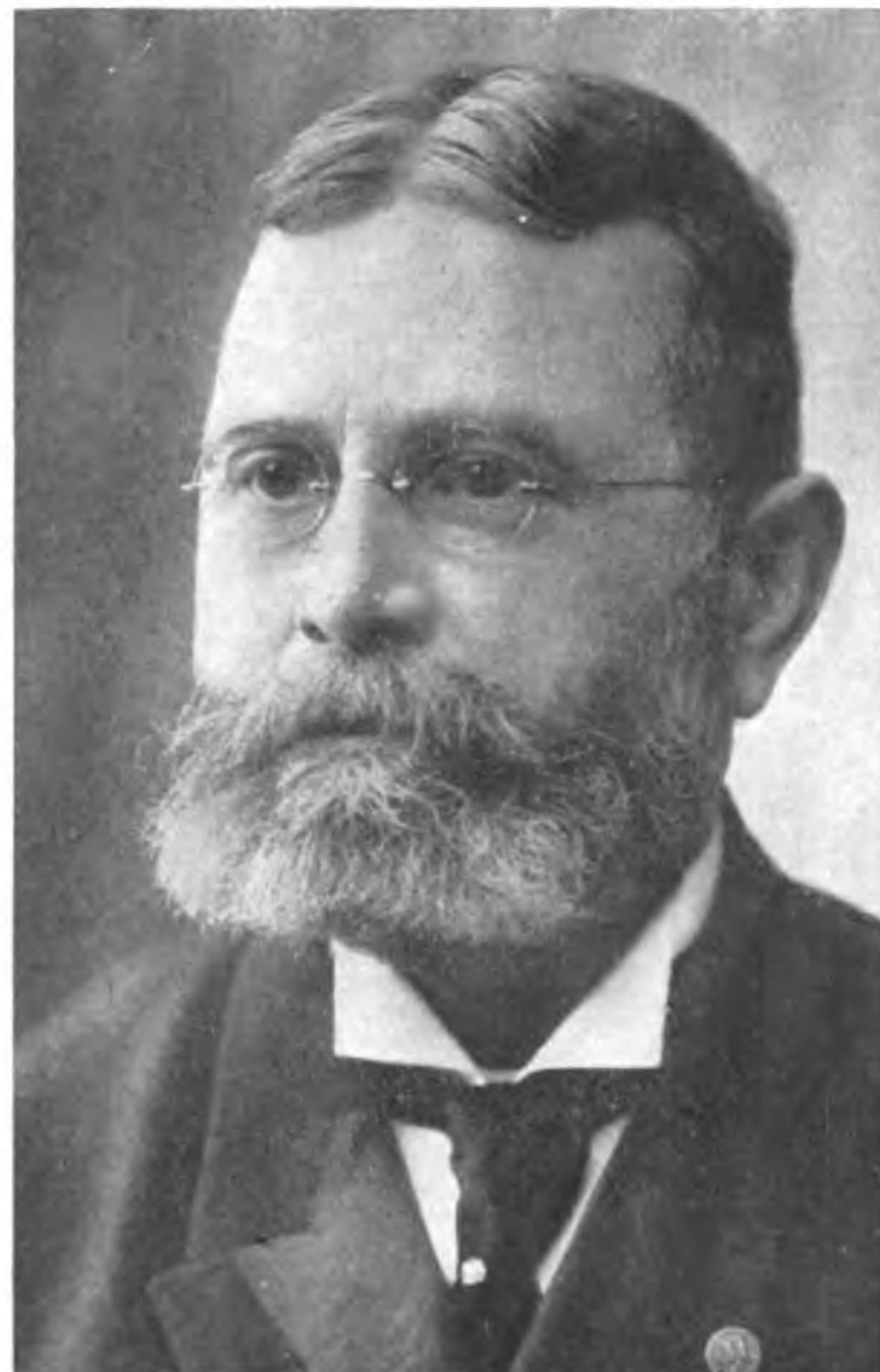
Only one model of the Monotype, and that the latest.

E. B. STILLINGS

Ephraim Bailey Stillings, the well-known Boston printer, died on December 30, 1917, at his home in Somerville, Mass. Mr. Stillings was born in Somersworth, N. H., in 1845, and at the outbreak of the war of the rebellion enlisted in the Massachusetts Infantry, his family having removed to Holyoke, though he was but sixteen years of age. In 1863 he reenlisted and served to the close of the war.

In 1886 he opened a printing office in Sudbury St., Boston, and in 1900 removed to the new building on Congress St. specially constructed and named for him.

In 1902 his business was consolidated with that of Griffith, Axtell, Cady Company, Holyoke, and was incorporated as the Griffith-Stillings Press. For several years past Mr. Stillings has not taken any active part in the management of the business although retaining his connection with it.



MR. E. B. STILLINGS

In 1906 the Griffith-Stillings Press installed their first Monotypes, and Mr. Stillings, from the beginning, has been a firm

friend of the Monotype and a believer in its ultimate domination of the composing room.

He was prominent in Masonic circles and in the Grand Army, also taking an active interest in several charitable and patriotic organizations, as well as local improvements. His gracious and kindly presence will be missed by all who knew him.



E. W. BLAND

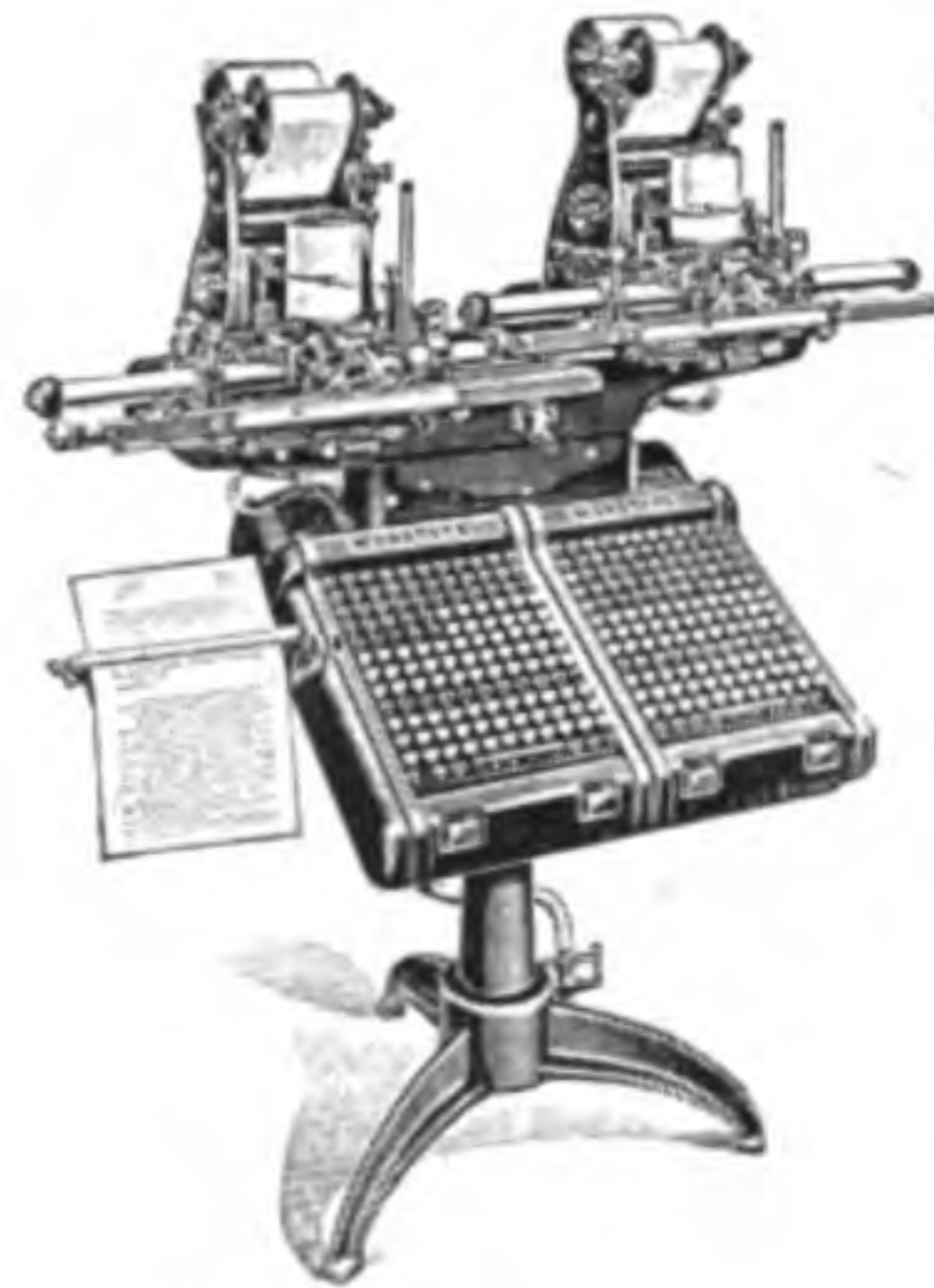
With regret we announce the death of Mr. E. W. Bland, of San Francisco, one of the first Monotype operators on the Pacific Coast. Mr. Bland located in San Francisco about the time of the fire in 1906, as operator for the H. S. Crocker Company, and has been continuously employed by that firm since that time. He had a pleasing personality and was favorably known to the craft and highly respected in the community. A good workman himself, he was always ready to boost the Monotype and prove his claims for its superiority.

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THE MONOTY

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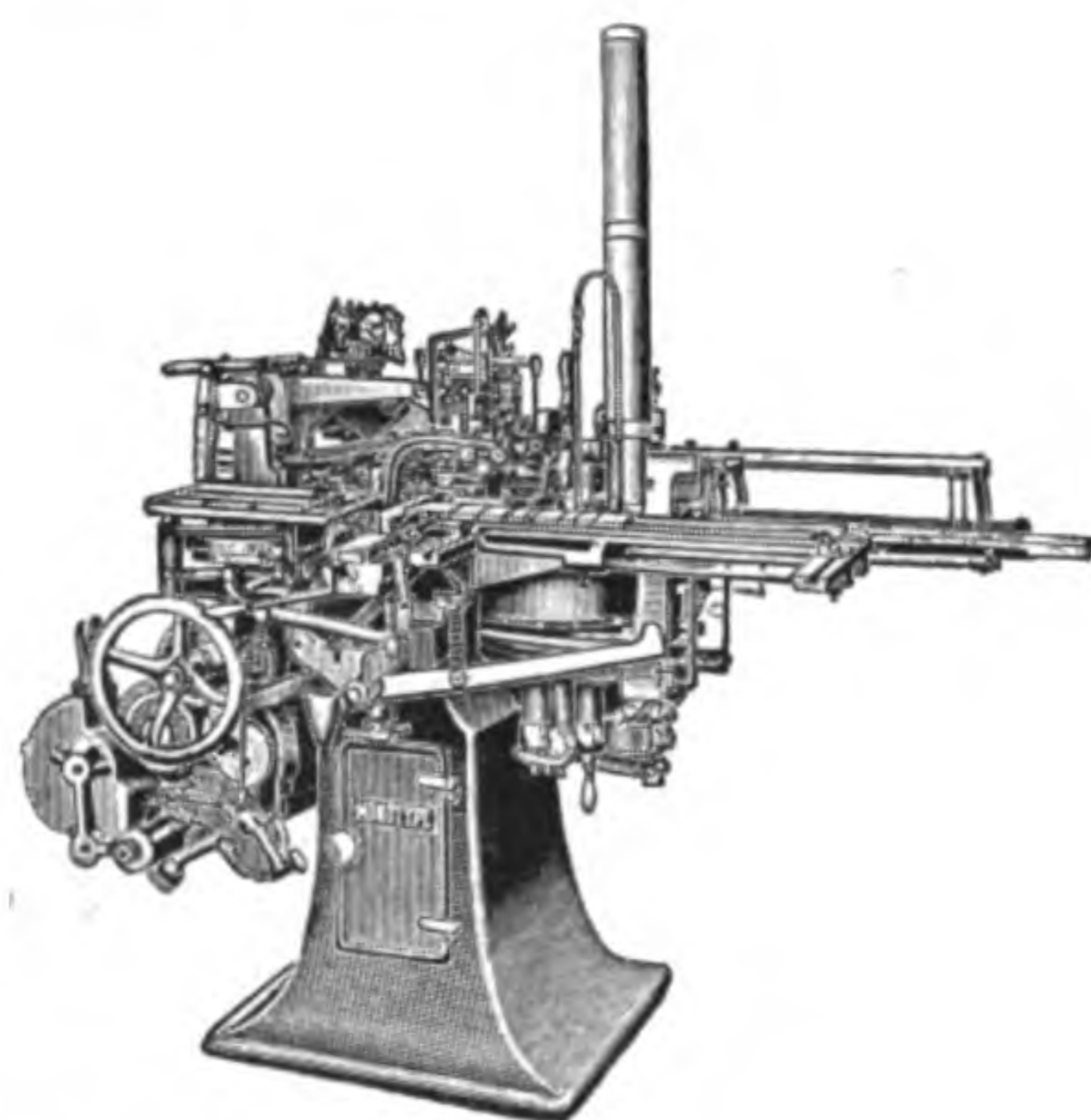
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True composing-room effi-
ciency is impossible without **TH**

action is Possible
"Monotype"

PE is essential to the success of any practical system of the one machine that provides for all the finest straight matter to the most practically limitless as a composer of type and matter on it is without a peer: it is productive but provides the entire composing room: it eliminates almost all variations and makes the effective: its effect is noticeable immediately and efficiency are cumulative.



THE MONOTYPE

Monotypes vs. Electrotypes

By WADE H. PATTON

The recent greatly increased cost of electrotypes caused a most thorough and exhaustive investigation in a large printing establishment as to the comparative cost of Monotyping and electrotyping forms that were to be kept standing or that were to be run two or more up.

The investigation extended through some twenty-five months and covered a great variety of printing, including bank, railroad, and miscellaneous commercial forms of every description. Accurate figures were obtained and tables were compiled from them that showed some astonishing electrotype waste.

In order to make a simple and clear comparison of Monotyping and electrotyping cost the results obtained on two jobs of bank deposit slips are given below. The deposit slips are used as an illustration, not because the results obtained were exceptional in any way, but on account of the fact that almost every one is familiar with such staple work. Other work showed a greater saving by Monotyping than did the deposit slips. The slips were the same size and were identical as to quantity and difficulty of composition. Type forms were 20 x 42 picas and were run five up in both cases.

Slip No. 1 was set by hand and five electros made, costing as follows:

Hand composition, 1.8 hours at \$1.50	\$2.70
Lock-up (type for foundry and electros for press), 0.8 hour, at \$1.50	1.20
Five electros, blocked, at \$1.02	5.10
Total cost to pressroom	\$9.00

Slip No. 2 had exactly the same number of lines, spacing and column dimensions, and was set in 8-point on a 10-point mold. One form was keyboarded and five forms were cast, with the following result:

Keyboard	0.4 hour at \$1.12	\$0.45
Caster (run five times)	1.6 hours at 1.50	2.40
Composition and make-up	1.9 hours at 1.50	2.85
Lock-up	0.4 hour at 1.50	.60
Total cost to pressroom		\$6.30

Standard hour costs for 1915 have been substituted in the above for the actual hour costs used in the original record, but they alter the comparative result only a few cents, and electrotypes are priced at the scale issued by the Electrotypers' Association.

Observe that these figures show a saving of \$2.70 by Monotyping instead of electrotyping, but it should be emphasized that \$2.70 is only a small part of the real saving. Of the \$9.00 expended on the electrotype job, \$5.10 represented a cash outlay to the foundry. Of the remaining \$3.90, actual payroll amounted to \$1.60, leaving only \$2.30 for general and departmental overhead and loading of every description.

The cost of the five Monotyped forms was \$6.30, of which \$2.60 was for actual payroll. The remainder of \$3.70 was a contribution to the plant overhead and loading as compared to a \$2.30 contribution in the case of the electrotypes. Stated differently, the electrotyped job paid \$2.30 overhead and the Monotyped job paid \$3.70 overhead. This additional saving of \$1.40, added to the saving of \$2.70 shown by the record, makes a total economy of \$4.10.

Pressroom make-ready on five type forms as compared to five electrotypes on wood bases increased the saving to approximately \$4.40. The Monotype costs represent a reduction of more than 37% from the electrotype cost.

In arriving at this saving of \$4.40 it is to be remembered that the plant bought electrotypes from the foundry. It might be necessary slightly to reduce the figure in case a plant is equipped for making electrotypes.

Both jobs of deposit slips were kept standing for future orders, and it will be interesting to compare the cost of holding them.

Obviously, storage costs the same in both cases, so that factor may be eliminated. The cost of the electrotypes having been charged to the customer in the first job, there is no depreciation, the only expense of keeping them being for insurance and taxes, which may be two per cent. or ten cents, plus possible cost of alterations.

The Monotyped job must carry 6 per cent. interest and insurance charge on the cost of the metal, but no depreciation charge, as that has already been included in the original cost of the job. The forms under discussion contained 116 square inches and weighed 27 pounds. In the original record, metal cost 12 cents a pound, but, for obvious reasons, let us use the present market price of 16 cents a pound. This would make the total investment \$4.32, and 8 per cent. of this, or 35 cents per year, as the cost of holding the Monotyped forms, as compared to 10 cents, the cost of holding the electrotyped forms, or 25 cents net cost, which is but a fraction of the saving of \$4.40 on the original.

When we consider the further fact that alterations can be made at little expense in the Monotype forms, which with electrotypes are impracticable and expensive and may mean the repetition of the entire first cost, we believe the shrewd cost student, looking for the truth alone, will stop the electrotype leak and use his Monotype machines with a little more judgment.

It is well to bear in mind just here that some of the most proficient cost students in the country ridicule the caster hour cost of \$1.50 used in the above records as being entirely too high, and some of their arguments have never been successfully assailed. Assuming their contentions to be correct, the saving of \$2.80 shown above would be materially increased.

Space limitations forbid going into reasons for using only hand work on the electrotype job instead of combining Monotype and hand work on it, further than to say that other accurate records of Monotype and of hand work identical in character showed almost exactly the same comparative result, and in some cases a result slightly more favorable to the Monotype way.

It has been argued that only four electrotypes should have been made, but any practical man who has watched the progress of this sort of a mix-up will pronounce it an unmitigated nuisance on the stone, press and shelf. It is short-sighted extravagance. Storing the original type form in one place and the four electros in another is an expensive complication. The use of unblocked plates instead of wood base plates has also been suggested, but many records show they are no cheaper in the make-ready, and they increase the lock-up time approximately 100 per cent.

As a basis for estimating the cost of casting forms as compared to electrotyping, the following table has been compiled, and it will stand the most searching scrutiny that can be given to it:

Type Size	Revolutions per Hr.	Ems per Hr.	Lineal Inches per Hr.	Square Inches per Hr.	Cost per Square Inch
12-point	8400	4000	.....	111	1.3 cts.
10-point	9000	4300	.....	83	1.8 cts.
8-point	9600	5000	.....	62	2.4 cts.
6-point	9600	5000	.....	34	4.4 cts.
2-point leads	7200	.....	5400	150	1.0 ct.
6-point slugs	3600	.....	2400	200	.75 ct.

The above table is based on a caster hour cost of \$1.50, and it is important to remember that it shows the output on a basis of straight reading matter. Nearly all standing forms running two or more up contain a large quantity of quads and leaders, and in such cases the cost per square inch would be reduced at least 20 per cent. Estimators generally allow 20 per cent. for leads and slugs in such work, making a further reduction in cost per square inch. It is also important to remember that casting machines make the type for the most intricate and complicated forms at the same cost per square inch as the simplest forms.

As a result of keeping the records in the aforementioned plant, the conclusion was forced upon the management that Monotyping was very much cheaper than electrotyping, except in the case of a few complicated forms set in small type.



Look over your cost records and see what distribution cost last year. How would your profits look with that much added to them? We can show you one way to do it.



The most important thing in advertising is the copy that fills the space; next in importance is the Monotype type in which it is set.

Men Are Needed

to fill the ranks of the National Army in order that Freedom for All People Forever may be guaranteed. Battles must be fought and victories won, and their work at home must be carried on while they fight for Liberty.

Battles Must Be Fought

in business also, and we must replace the men behind the machines who are temporarily behind the guns. The composing room must be kept up to capacity by educating the hand compositors to become keyboard operators.

The Monotype Schools

are ready to help in this most important work and invite printers to send their compositors to learn keyboard operating; or, if you cannot send them, to make satisfactory arrangements to place an additional keyboard in your plant for this purpose.

Any Compositor is Eligible

and will find it easy to learn this nicest and cleanest, most healthful and remunerative part of the printing business. There is no charge for tuition, and many compositors who cannot go to the front can do their bit by learning keyboard operating.

Enroll At Once

because the opportunity is the greatest ever offered and the time required for training the printer is short, and a position awaits you as soon as you have attained efficiency.

Employers, encourage your compositors to enroll; it will help you.

The Need is Urgent and the Returns Satisfying



LANSTON MONOTYPE MACHINE COMPANY, PHILADELPHIA

NEW YORK BOSTON
CHICAGO TORONTO

Monotype Company of California, SAN FRANCISCO

A New Ad-Room Cabinet



MR. FRANK J. SMITH

THE importance of any piece of work-room furniture is in proportion to its effectiveness in conserving manual labor, and judged by this standard the compositor's work-bench and cabinet is the most important thing in the newspaper ad room after the type itself, consequently many attempts have been made to design the perfect form of this accessory to efficiency.

It has remained, however, for Mr. Frank J. Smith, superintendent of the New York *American* and *Journal* composing room, to invent what seems to be the most commodious and convenient combination cabinet and work-bench for the ad man that has been offered.

Mr. Smith has other inventions of value to printing-office efficiency to his credit, but this cabinet is his most important contribution to the advance of the craft.

This cabinet is a space, a time, a labor and a money saver. It means more comfort and less fatigue for the workman and produces better efficiency all along the line.

In this new device Mr. Smith has apparently aimed to save floor space by combining the compositor's frame with the type cabinet and the work-bench and eliminating from the composing-room floor various type receptacles located in isolated places and serving for the storage of sorts. This he does by distributing this class of material among his cabinets in such a manner that any one cabinet is a duplicate of each of the others, each carrying a very generous supply of all needed material. In fact, among the claims for this cabinet is one to the effect that, for all the purposes of the ad-man's occupation, it is in itself a complete printing office.

The Smith cabinet has an entirely new electric lighting arrangement whereby the light falls directly upon the work in process of construction, while at the same time the eyes of the compositor are protected from irritating rays because of the location and adjustment of the lights upon scientific optical principles.

The following claims are made by Mr. Smith for his invention:

1. Saves floor space.
2. Carries more material in a more convenient manner than any other type cabinet now on the market.
3. It is the only cabinet that provides a flat working space, leads and slugs of all necessary lengths, and figure sorts for ad work.
4. Only flat-top cabinet that allows a case to be put up without brackets. This is accomplished by means of four upright posts appearing on the top of the cabinet.
5. Only cabinet that is properly lighted, and which does away with drop or ceiling lights.
6. Only cabinet which carries a sufficient quantity of quads and spaces to meet ad-room requirements.
7. Is lower than any other printers' cabinet, the extreme height being 53 inches.
8. Each cabinet is in itself a complete printing office and does away with the keeping of quads, fractions, slugs and rules in one or two central places.

Our illustration shows a front view of the cabinet, which may be briefly described as follows:



Floor space occupied, 32½ by 70 inches; height to top of work-bench, 41 inches; available working space on the flat top, 24 by 70 inches; at the right-hand end are 20 pigeon-holes for special borders; at the left end are 20 quarter-size case for figures and fractions. At the end next the pigeon-holes is a small special case,



SMITH CABINETS IN NEW YORK AMERICAN AD ROOM

We show illustrations of the New York *American* composing room, where twenty-five of these cabinets are in daily use and are proving a constant source of pleasure to the compositors as well as of profit to the proprietors. These photographs show the advantage of the decreased height of these cabinets in affording the foreman a view of the entire composing room and also in allowing a better distribution of lighting.

This cabinet certainly marks a decided advance in composing-room furniture and should be investigated by all progressive newspaper managers and superintendents. It will be manufactured in steel by the Hamilton Manufacturing Company of Two Rivers, and placed on the market at a reasonable price; but in a fixture like this, price is the last consideration, as it is a producer and not an expense.



9½ by 13 inches, which contains 8-, 10-, and 12-point paragraph and per cent. marks, leaders, dashes, and parentheses.

Extending across underneath, in front, is a shelf 9½ by 48 inches that will hold quarter-size rule cases or supply of full-length Monotype rule.

Leads and slugs are so placed that they are within easy reach as the compositor works on his galley, and provision is made for carrying a reasonable quantity of each of these sizes: 3½, 4, 4½, 5, 5½, 6, 6½, 7, 7½, 8, 8½, 9, 9½, 10, 10½, 11, 11½, 12, 12½, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 23½, 24, 24½, 25, 25½, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 35½, 36, 36½, 37, 37½, 38, 38½, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 48½, 49, 49½, 50, 51, 51½ pica ems in length.

The compositor works in front of the cabinet and there is room for two to work. The cabinet holds full-size cases which open from the back.

An extra supply of quads and spaces is provided for at the back, over the tiers of cases.

A slot of galley depth, single column width, runs along over the quads and spaces and will prove useful for any special material, pick-ups, corners, ornaments, etc.

WE ARE glad to congratulate the Saint Vincent College, Beatty, Pa., upon the splendid appearance of the first issue of their monthly magazine, produced on the Monotype. It is usual to make allowance for small defects in first appearances of any kind, but here is one that does not need any excuses. It is a good piece of work and does the College press credit.



CORNER OF NEW YORK AMERICAN AD ROOM SHOWING SMITH CABINETS

UNUSUAL NEWSPAPER ADS

Novelty is a desirable feature in advertising, and the unusual adds to the eye-catching value of the newspaper ad. These facts are admitted by the best advertising authorities, and accordingly two full-page advertisements that have come to our notice this month score high.

In another column we reproduce a page which appeared in *The Daily Colonist*, of Victoria, B. C. It is strikingly novel and unusual, yet well balanced and well displayed. The background is composed of six-point column rule and contains over one hundred linear feet, while the panels are surrounded with other faces of rule. Of course it was produced in a Monotype ad room, as such work by any other method would prove prohibitively high in cost.

Another novel ad is one that appeared in the Worcester, Mass., *Evening Gazette*. It also contains a background of rule, but in this case the rule is two-point body with one-point face and covers the entire page except five small panels which are cut into it, two containing engravings of automobiles and two the trademarks, while the fifth shows the name and address of the local agents. This page contains 710 feet of two-point rule. It is the work of Mr. David Sigalove, of the *Gazette* ad room, who designed and set it. We regret that we cannot show a reproduction of it on account of the character of the cuts. This advertisement was gotten up in three hours and shows Monotype economy of production.

It being admitted that novelty and unusual features are desirable, and shown in this and other issues of MONOTYPE that the Monotype is the only machine that can produce such attractive ads at a reasonable cost without detracting from its usefulness for other work, does it not seem that the Monotype is the only machine and that no newspaper can afford to be without it?



Monotype economy is emphasized by the fact that the *Baltimore News* cleaned up forty-eight pages of ads in seventy minutes on January 20, 1917. Think what that used to mean with hand distribution of old type!



Built on the unit system, your Monotype can always be of the very latest pattern.

THE DAILY COLONIST, VICTORIA, B.C., SUNDAY, SEPTEMBER 23, 1917

13

BUY ONLY MADE-IN-VICTORIA PRODUCTS

The Daily Colonist

ESTABLISHED 1860

The Victoria Daily Colonist is a distinctly Made-in-Victoria product, and it is read in more homes in Victoria and Vancouver Island than any other daily newspaper.



HOME PRODUCTS MADE ON THE PREMISES

The Colonist employs a large staff of artists and skilled mechanics, who produce the highest grades of Book, Job and Commercial Printing, Printed Office Stationery, Loose Leaf Office Supplies, Lithographing, Map Printing, Embossing, Engraving on Copper or Zinc, Copperplate Printing, Bookbinding, etc.

There is no Reason why Victoria Merchants and Manufacturers Should Send Out of Town for Any of the Above Mentioned Classes of Work

In the Letterpress Printing Department a great many of the type faces are Manufactured on the Premises, thus ensuring a clear, sharp-faced impression. The Colonist is the only printing establishment in B.C. manufacturing its own display type.

AN EFFECTIVE MONOTYPED ADVERTISEMENT

MEANT TO BE READ

"Type," said the Foreman, "was made to read,
And that is a maxim it's well to heed,
For the printer frequently gets a start
With a craze for 'beauty,' a bug for 'art,'
Which holds him fast in a fearful gripe
And keeps him trying mad stunts with type,
With seventeen fonts and seventy styles,
And borders by thousands and rules by miles,
A job with a swagger and high-bred look,
But hard to read as a Chinese book!
We must keep ourselves to this simple creed,
Type was made—and is meant—to READ!"

—London Opinion.



By releasing the compositor from the drudgery of distribution, the Monotype gives him more time for head work and increases his efficiency.

A Typical Story of a Typical Installation

By J. A. THOMAS, Assistant Superintendent of Excelsior Printing Company, Chicago

When, nearly a score of years ago, the writer saw the first Monotype, then on exhibition in an empty store in this city, and watched the die-case skip about over its plane of activity, he was filled with astonishment at its ingenuity. Now, while handling its varied output day by day, he never ceases to wonder at its utility.

One of the features of this utility—the Non-Distribution System—is a recent development, and for that reason is creating a lively interest at this time, and we are certain that a short history of a typical installation will be welcome.

Up to three years ago this plant was operated under the old "hit-or-miss," "by-guess or by-gosh" method, using the Monotype equipment of two casters as a composition unit only. About that time the management decided to take advantage of the suggestions offered by the efficiency department of the Monotype Company—suggestions which then, as now, have proved invaluable.

The needs and possibilities of the shop were carefully studied, and the work was started and has progressed step by step in a way which we shall briefly outline.

A canvass was made to ascertain how much useless material was laying around and it was surprising that so much junk had been cherished and hid away through the old fear that it would be needed again and possibly could not be replaced. Over the protest of each workman who had a cache of such trash, a complete clean-up was made down to actual type, brass rule, leads and slugs supposed to be in regular use.

This was the first step toward orderliness.

The next move was to determine what faces should be duplicated in Monotype and retained. Here was another surprise. Probably one-half of the fonts were useless through lack of sorts; others were so badly worn as to render them unprintable; some cases had not been touched in years and served no purpose.

The list, as finally decided upon, was such as would cover practically every need of a diversified line of printing. Matrices for the faces most in use were bought outright; others were obtained through the Monotype library system, and the work of rehabilitation was on.

The shop was charted as to location of each series; the number of cases of each size was decided upon; and a card index, covering the entire proposition, was prepared. As each size was finished a record was made of the amount of type cast, time of operation and the date. By this method each lot of type shows its own cost. Any face that later shows a need of sorting up oftener than twice a year is considered worthy of outright purchase of matrices, if not already on hand. Each series was finished up in this manner, and as the installation progressed, the manner of distribution became more

and more simplified. The Monotype type was remelted and only such foundry faces as were not as yet displaced were distributed. The rule, leads and slugs were placed on galleys for the disconsolate apprentice to brood over.

The matter of sorts storage was worked out coincident to the casting up of each series, and it was found that it would be necessary to store sorts of only the body type and spaces and quads. An extra-deep quad and space case was placed in each alley, and in the smaller sizes, these were sorted direct from the caster.

In a few months there were at the disposal of the compositors twenty-two double racks filled with new type, every case of which pays its keep.

All this with practically no outlay for metal; neither was it necessary to employ any overtime in these operations. This brought the system up to the lead and rule question, and for a while it threatened to be a teaser. The shop was bountifully supplied with this material, and it looked like a wanton waste to discard material that in many cases had been used but once.

However, a Lead-&-Rule Mold was installed and the caster started on its final mission of creating a regular print-shop. A slug storage cabinet in the composing room was emptied and moved into the caster room; in a week it was full.

Two boys were kept overtime one night and the next morning the twenty-four individual lead cases were beaming a cheery and plethoric welcome.

Thus completed, the system has been in operation over a year, during which time it has not been necessary to employ one minute's overtime to keep ahead of the needs of the composing room.

The following exhibit will show briefly where the benefits of this system fall. A representative month, showing an average of 31 per cent. non-chargeable time, was taken as a basis:

Percentage of Non-Chargeable Time

8 Compositors	6%
2 Stonemen and 1 O.K. Man	25%
1 Dead-Stone Man	50%
1 Cut and Vault Man	70%
2 Boys on Proof Press	90%
2 Keyboard Operators	25%
1 Caster Operator*	50%

In the caster room, approximately one-half of the time is spent on chargeable work and the other half on type and material casting,* which, while productive, is considered non-chargeable. The non-chargeable time

*The time of the caster used in making material for the hand composing room is often mistakenly taken as non-chargeable, as here mentioned, and this error leads to a wrong conception of costs in the various departments. The proper method is to charge the time of the caster for making type and material for the compositors to the hand composing room. As the Monotype type replaces the foundry type, so the cost of making it takes the place of the purchase and maintenance of foundry type and hence is a legitimate part of the cost of hand composition, though a much lower one than that which it replaces.

for operators is employed in proof-room revising, pasting up, measuring up, marking copy, etc. Strictly speaking, this time is department overhead.

It will be seen by the above that the greatest loss of time falls on the cheapest help, or on help that could hardly be expected at any time to be productive. The time lost by hand compositors apparently is not preventable, being time when no copy was available.



Among the improvements that have been worked up during this time are an extra-deep job case and the unit value correction case. The extra-deep case, when sorted properly, holds 50 per cent. more than the standard California job case. The Monotype correction case is used for body type, and each box has stamped on it the unit value of the characters. By working from this case the compositor can tell instantly, without sizing up characters, what spaces are needed to justify the line or what letters are interchangeable. This case also has a new arrangement of the cap side, which permits of practically every character needed in commercial work.

All the special sorts necessary for this plant are carried in a small cabinet of twenty quarter-cases. At no place in the shop will there be found any storage boxes, cigar-boxes, or needless material. No type is stored on galleys, the time elapsing between the need of sorts and the time that it is possible to produce them being so short that no intermediate storage is required. A system of extra cases of all the popular faces has been installed, and each case shows on the label how many corresponding cases of that size are to be found in the plant.

The dead-stone man has charge of the library system and it is his duty to see that matrices are ordered in time to meet any shortage. The casterman does not leave his room. A case to be replenished is brought to him and placed in his rack; when filled, the dead-stone man returns it to the proper stand. The lead and slug storage cabinet, being in the case room, is under the direct supervision of the casterman, and it is his duty to see that no sizes run out.

This plant has been called the "show-case" in the printing world; but what has been done here is possible in any plant in operation. The cost is not extravagant and it requires no supernatural powers to bring this about—merely persistency and the expenditure of a little common sense. The working and sanitary con-

ditions are perfect. The help is satisfied and pleased, it being considered a treat to be permitted to work in this plant. Customers shown through the plant are immediately impressed with the business-like appearance, and many have given their orders on the strength of the first impression they formed of this composing room.

To say that the whole system is satisfactory to everybody concerned would be putting it mildly.



ONLY A MEMORY NOW

From our esteemed contemporary, *The Typographical Journal*, we lift the following interesting effusion from a compositor who appreciates his liberation from the thralldom of distribution:

The vexatious problem of distribution in the *Globe-Democrat* ad room has at last been solved by elimination. The installation of three Monotype machines and the inauguration of the Non-Distribution System has lifted an enormous burden from the minds of those who permitted chaotic conditions to get upon their nerves. The complex and confused state of affairs prior to the revolution may be gleaned from a perusal of the following lines. They were written several months ago, during the acute stage, and it was considered inadvisable to give them publicity at that time, lest, perchance, some sensitive person of infirm temper should misinterpret the jocular motive of the writer and feel that he was personally, perhaps offensively, alluded to. However, as that vexatious epoch has now passed into history, and the cry of "How's distribution?" is no longer heard in the land, the writer feels that he is measurably safe in committing the following production to the press as a reminiscence of the good old hand days:

"HOW'S DISTRIBUTION?"

The shades of night were falling fast,
When through the ad-room alleys passed
A wild-eyed wight with brow o'er-cast,
And ever and anon he asked,

"How's distribution?"

As fierce and fiercer flamed his ire,
His face grew dark, his eyes flashed fire,
The air grew dense and then turned blue,
As he fiercely roared at the ad room crew,

"How's distribution?"

"This de-dashed adroom makes me sick,
I can not find a decent stick;
There ain't a thin space in the shack,
And not a d—d lead in the rack—

'How's distribution?'"

"It is a fact none can deny,
This bloomin' shop is a mess of pi,
And if you ask me the reason why,
These words shall be my sole reply:

'How's distribution?'"

L'ENVOI

The shades of night had deepened far,
When he wildly signaled a passing car,
And as he flung himself aboard,
He to the conductor loudly roared—

"How's distribution?"

HOMER A. DANFORD.

Something Every Printer Must Consider

REPRINTED FROM THE INLAND PRINTER

SEPTEMBER, 1917

While improvement after improvement has been made in the equipment of the pressroom, and invention after invention rendered the pressman's work easier and the press production greater, the man in the composing room works with practically the same tools and material that were used centuries ago. Improvements have been made in the method of making type and in the designs for the type faces, but the compositor still sets them in the same old way and distributes them after use just as was done by the first printers, and his production is held down to possibly half of what it might be under ideal conditions; while the quality suffers because he cannot give sufficient attention to it and maintain the physical effort at present required.

The old-time book and news compositors have disappeared, it is true, owing to the invention and perfection of the typesetting machines, but in the majority of plants the compositor still labors with insufficient material, still picks for sorts and makes pi, still wastes time hunting jobs to pick, then wastes more time clearing away the pi and putting the less used sorts in the cases.

Is it any wonder that we find composing-room hour costs soaring skyward and non-productive hours averaging a third of the total paid in wages?

How can it be helped? Well, one way would be to buy enough type to give every compositor all the sorts he needs, all the leads and slugs he requires, and plenty of spaces and quads. This would mean continuous buying, and possibly might make quite a foundry bill each month; but the writer believes that even then it would prove profitable, and the wages saved the first year would equal the amount paid for type. In the succeeding years the cost of new material would be slightly less. Such has been his experience as manager of a good-sized jobbing plant.

This way would, of course, be only a partial remedy, as the type would have to be distributed, and the saving would not be over ten per cent., and possibly only about seven per cent., of the total payroll. This leaves the opportunity for further saving, as it still allows a waste of about a fourth of the total time purchased.

Then there is another way, and that is to buy new type for every job and not distribute it after use. This would mean a considerable outlay for material, but the saving would also be very great—in all probability twenty-five per cent. of the payroll, as all the time now wasted in distribution, hunting sorts and picking would be saved and become productive time. Instead of sixty-seven to seventy per cent. productive, we would be able to get from ninety to ninety-five per cent. of salable time out of the composing room.

At the present time the high cost of type would make the expense of this method greater than the net saving; but even at that it might pay when the extra quality afforded by the new type is taken into consideration.

Up to this point we have been thinking along the old lines. Now, suppose we were to treat the composing room as well as we do the pressroom and install modern machinery for labor-saving purposes. We have? Well, hardly! Oh, yes, we have installed some linotypes, some intertypes, some Monotypes, a few slug-casting machines, a saw or two, and possibly a type-high planer; but we have failed to see that the great big saving that is to come to the composing room is going to come from the use of the facilities for cheaply supplying type for the hand compositor and doing away with the time-killing work of putting the used type back into the cases—in other words, some use of the facilities that are offered to render all the compositor's time productive in setting jobs without having to stop and look for sorts or other material, or for taking apart the job he set a few days ago to get material to go ahead with his work.

This abolition of distribution is surely coming: just as surely as the sun will shine again tomorrow or day will succeed the night. It will pay because it will compel the printer to buy or produce sufficient material to work with, that already used being systematically destroyed. Prejudice may delay it; the fact that a certain machine is advertising its special fitness for the new method of efficiency may create a little opposition in some places by other manufacturers; but the force of modern competition, and the conditions which are bound to come but have been hastened by the war, will force the matter upon the attention of all printers who are in business for profit.

It would be the part of wisdom for every employing printer to carefully consider this coming evolution in the trade, and place himself in position to meet it before conditions force him to scramble out of the way of the avalanche of progress to avoid being crushed.

The writer feels that this matter should be called to the attention of our readers who are responsible for the profits in the plants with which they are connected, even though to some it may seem a long way to look ahead and that only one concern is advertising its remedy. Be sure of one thing: no other manufacturing business would stand for such an excessive cost (or loss, if you so desire to call it) without looking for the remedy.

The loss of from twenty-five per cent. to thirty-three and one-third per cent. of the time in a most important department of the business has helped to keep the printer poor. It is really startling when you come to

think of it, and should cause every printer and every organization of printers to institute immediate and earnest inquiry for the remedy. If you are not convinced, read this article over again and study how it affects you. Then, if you have a remedy to offer, these columns will be open to you, and we shall be glad to pass it along to the 30,000 struggling printers of the United States who are just hungry for a chance to make a saving in the cost of manufacture.

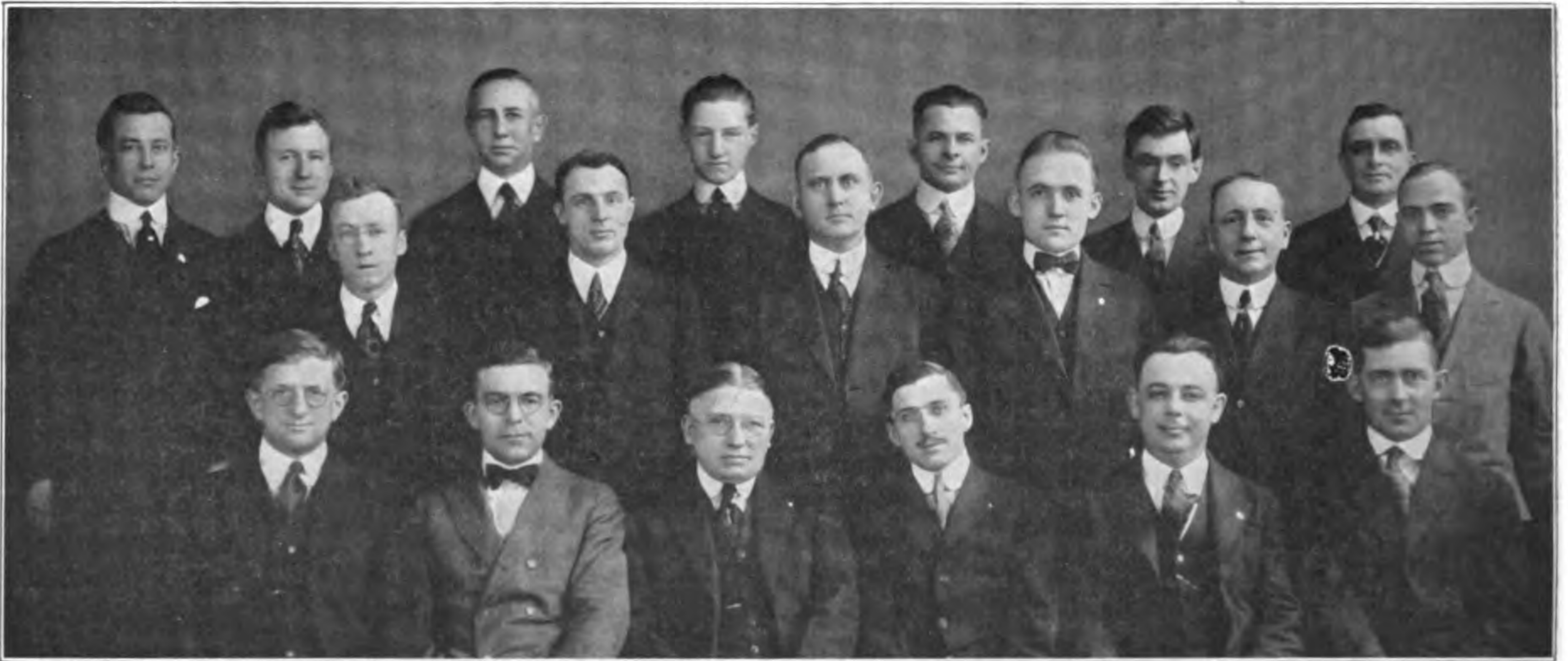
EDITOR'S NOTE—We have great pleasure in reprinting the above article from the September issue of *The Inland Printer* because it so fairly states the case for composing-room betterment. We, of course, would add that the only correct way to secure the benefits of which it speaks is to install the Monotype in your composing room and let it pay for itself with its by-products while it increases your profits by eliminating non-productive time. Study this problem carefully and act promptly, for, as *The Inland Printer* says, "the abolition of distribution is surely coming."

A HANDY CHART

EVERY printer realizes the advantage of being able quickly to determine the proportionate size in pica ems of the various type faces in the plant, and many printers have taken the trouble to measure up a number of faces and make a note of or memorize the data, but it has remained for the Superior Typesetting Company of Los Angeles, Cal., to show an easy way to chart this knowledge.

They have prepared a chart of every font in their plant by setting the alphabet in caps and in lower case and arranging these according to point size; then printing them in register over a sheet ruled vertically in picas, each pica being numbered from the left at the top and bottom of the page. This enables any one to see at a glance just what proportion the various fonts bear to one another.

The chart is simple and easily made, and any printer can construct one for the fonts in his plant, though the Monotype fonts carry with them their index of proportion in the set number.



MEMBERS OF OUR NEW YORK OFFICE FORCE

Reading from left to right—Top row: W. J. Chambers, Jr.; H. R. Garrett; J. M. Gordon; Philip Subotich; Geo. Tluck; Osborn Wells; Wm. Boyle
Middle row: Frank Cannon; Wm. Hodgkinson; Wm. Corter; George C. Hummel; Wm. Hyslop; David Carlson
Bottom row: M. M. Gottlieb; H. S. Rossiter; Richard Beresford; Fred Weindel, Jr.; Wm. Massey; Samuel Dewees

THE MONOTYPE MEN OF THE NEW YORK DISTRICT

Our illustration shows some of the men who are making history for the Monotype in the New York district, under the guidance of Mr. Richard E. Beresford, manager of the New York district. They are all hustlers and anxious to help Monotype users, these salesmen, inspectors and efficiency men. We want our readers to get acquainted with their faces, and Monotype users in the New York district to make their personal acquaintance and learn what "Monotype Service" means. Our interest does not stop with the sale: there are more men on the service staff than on the selling end, and all of them are ever ready and willing to help Monotype customers to get the best possible results from their Monotypes. If you are not getting the best out of your machines, call the nearest Monotype district office and get service with a big "S."

THIS ISSUE OF MONOTYPE is composed in our No. 172 Series and Monotype rules and borders. The following firms coöperated in its production:

Composition by The Bradford Press.

Engraving by Gatchel & Manning.

Electrotyping by Royal Electrotype Co.

Printing and Binding by W. A. MacCalla Co.

"The best ad a printer can ever get is an enthusiastic satisfied customer."—*Ben Franklin Montbly*. Monotype printers who use Non-Distribution have numbers of such customers.

MONOTYPOGRAPHY

THE advantages of the copyfitting system for illustrated magazine work have been tested by The Fletcher Company, of Philadelphia, and they are enthusiastic in their praise and send us an excellent specimen in the *Photoplay World*, which is composed in Monotype Series 21 and profusely illustrated. The presswork is also high grade.

It is the peculiar privilege of Kable Brothers Company, of Mount Morris, Ill., to have their house organ a real sample of their specialty, which is publications for fraternal and other organizations. The eight pages of *Kablegram* are all Monotyped and well printed.

THE November number of "The Stamp," issued by Faithorn Company, Chicago, is a splendid example of quadri-color halftone work, combined with Monotype text in Series 164J. The cover is also in four colors. Such an exhibit of careful design, make-up and printing should prove a producer of big returns to Faithorn Company.

UNDER the caption of "Typography That Tempts Trade," we have received from Joe W. Short, with Mortimer & Co., Ottawa, Ontario, a handsome booklet of twenty-four pages and numerous inserts. The story is good, the mechanical work excellent, and the idea well conceived. It is composed in Monotype Series 21.

FROM W. H. Hoskins Co., Philadelphia, comes a beautifully made gift book entitled "Social Suggestions." Its forty-eight pages, 7½ by 10 inches in size, are crowded with illustrations that suggest appropriate gifts for different occasions, and the text is attractively displayed in Monotype faces.

SOLANA & Co., Havana, Cuba, have published a handsome quarto, "Libro Azul de Cuba" (The Blue Book of Cuba), which is beautifully printed on coated stock and profusely illustrated. The text, which is composed in Monotype Series 172, is in parallel column of Spanish and English. It is bound in blue morocco, with gold side stamp, and is indeed a handsome book. Messrs. Solana & Co. also send a volume of "Cuba Monumental Estuaria Epigrafica"—a large quarto of about 700 pages replete with illustrations. This also is composed in Monotype Series 172.

AN UNIQUE blotter comes from the Jenson Printing Co., of Minneapolis, Minn. It is composed entirely of Monotype type, rules, and borders and was designed and composed by Mr. C. H. Peterson. This firm is using the Non-Distribution System and says, "We have our own type foundry—casting new type for every job."

A NEAT folder from the Leader Publishing Co., Ltd., of Regina, Sask., emphasizes their message to buyers of printing thusly: "Let those who serve you best serve you most." This firm is making a specialty of real service.

CRAIN PRINTERS, LIMITED, Ottawa, Canada, have moved to their new home at 145-149 Spruce St., in a new building which has been built especially for them. It is one story in height, with saw-tooth roof, giving abundance of light over the whole floor and splendid ventilation. They have also increased their equipment.

FROM Norman T. A. Munder Company, Baltimore, come several fine examples of the correct use of Monotype Series 164 in booklets. Typography is indeed an art in the hands of such men as Mr. Thompson, of this firm of real printers.

The Proof is the appropriate title of the house organ of the Sunset Publishing Company, of San Francisco. It is indeed a proof that the Sunset people know what constitutes good printing and how to produce it. The body of the booklet is printed in two colors, on gray suede finish stock, and the cover is of a darker shade of gray printed in four colors; there is a four-color insert tipped in. The entire booklet is composed in Monotype type.

AN EXAMPLE OF COPYFITTING

This ingenious example of copyfitting possibilities is the work of Mr. A. C. Valiant, operator in the plant of the Stewart, Scott Printing Company, St. Louis, Mo. It was laid out by the copyfitting system and key-boarded and cast as it appears without any overrunning. We are printing from an electro of the original composition, and no attempt has been made to improve it in any manner.

This is a stunt, of course, but it shows what may be done by copyfitting and gives an idea of the value of copyfitting for commercial work. If such stunts can be done, how much easier the ordinary requirements of every day or even special catalog composition.

It will pay every Monotype printer to investigate copyfitting. It is a time saver, a labor saver, and a profit producer, as well as a first aid to efficiency.

As
we
come
to this
joyous
festive
season, let
us fix our
eyes on that
Divine Person,
who, by His
miraculous entrance
into the human race,
has made this Christ-
mas day possible. ¶
Hundreds of years be-
fore He came, the Pro-
phet had announced the
very place of His birth. And,
when the fullness of time
was come, by a strange sequence
of events, His parents made the
tedious journey to Bethlehem. And
there the Virgin "Brought forth
her first-born Son and laid Him in
a Manger." ¶ When this child grew
up, He spent His life among the people,
healing their sicknesses, finding up their
broken hearts, scattering gladness wher-
ever He went. ¶ And as a recompense,
cruel hands nailed Him to a Roman cross,
and those whom He had never wronged "pierced
His hands and feet." ¶ "But He was wounded
for our transgressions and by His stripes we
are healed." So His death was not in
vain. Nay, through death He de-
stroyed him that had the power
of death. ¶ Therefore,
as we are seek-
ing to make
others
happy
by our
gifts,
let us remember how happy we have
been made by "God's unspeakable gift."

This copyfitting sample should have appeared in the Christmas issue of MONOTYPE, but delay in receiving the electrotype, which did not arrive until we had gone to press, caused it to be held over.

MONOTYPOGRAPHY

"THE CENSOR" is the suggestive title of the annual of the Press Club of Seattle. It is a quarto of 88 pages, and is printed by the Metropolitan Press of Seattle, Wash., and is Monotype from cover to cover, including the display type and all the rules and borders. Mr. Knapp, the superintendent of the Metropolitan Press, tells us that this job is also interesting because the Monotype operator, Dickinson, arranged and set by hand all the display ads in the book after he had set and cast the type for the rest of the book on the Monotype. The job is a good one, both from the point of view of the composing room and from that of the pressroom. The display is well balanced, and the Monotype faces are well selected to make an effective piece of work.

THE CASLON PRESS, Toledo, O., have completed a catalog of about 800 pages for the National Supply Company of that city which is well worthy of mention as a specimen of Monotype tabular composition. All the type, rules, leads, and other material in this catalog were made on the Monotype. Of course, the presswork is good, as the Caslon Press for a long time were the printers for the Willys-Overland Motor Company, and are now turning out some of the best automobile printing in the country. This firm also has turned out some beautiful examples of fourteen- and eighteen-point composition on the Monotype.

FROM the Pacific Coast comes a handsome little specimen book of Monotype faces that can be promptly supplied by the Monotype Composition Company of San Francisco, Cal. It is a sixteen-page booklet, 7¼ by 10½ inches in size, bound with a silk cord. The faces shown are conveniently arranged in series, and enough of each size is given to enable an intelligent selection to be made. It will surely prove a convenient desk companion for the customers of the Monotype Composition Company.

"BY THEIR works ye shall know them" is as true of printers as of other men, and any one privileged to examine the fine lot of specimens of catalogue work recently Monotyped by the Sheffield, Fisher Co., of Rochester, N. Y., will at once place them in the front rank of good printers. All the samples are so good that it is not possible to say which is best, but all show Monotype versatility, and the design and make-up reveal the touch of a master hand and mind.



ANOTHER MONOTYPE STUNT

The following letter explains itself, and the suggestion that it gives may prove useful to other Monotype users in an emergency, as it has to our correspondent:

EXETER NEWS LETTER
Exeter, N. H.

Lanston Monotype Machine Company,
Philadelphia.

Gentlemen: We had occasion to use several sizes of crosses in Red Cross work, sometimes a number at a time. We produced them at a minimum of expense by using high Monotype quads with an underlay.

Yours truly,

JOHN TEMPLETON.

The most important feature of the cross used for the Red Cross insignia is that it shall be truly correct in proportion and squareness, and this making it of five square em quads insures absolute correctness.

We hope that this suggestion will prove of value to some of our friends and also that they will send along information of other ways of using Monotype products to overcome difficulties and reduce cost.

Monotype Metal Cleaner



and
Cleaning
Rod

NOT a flux, to take the dross off the top of the molten metal, this compound is just what its name states—a *metal cleaner that takes the dirt and impurities out of the metal.*

To get the dirt out of metal you must work the cleaner into the metal to free the dirt so that this dirt may rise to the top of the metal.

Monotype Metal Cleaner is a paste that is applied at the bottom of the metal and works up to the top, bringing the dirt and dross with it.

The paste is put in the cup at the lower end of the Cleaning Rod, and, as the metal is stirred with the rod, the paste melts and passes out through the holes in the side of the cup.

There is just enough moisture in the paste to agitate the metal and thoroughly mix the metal so that the cleaner not only insures clean metal but also a much more uniform mixture than can be obtained by hand stirring.

For recovering the richest metal, tin and antimony, from metal skimmings that have hitherto been sold as dross, the cleaner pays for itself many times over.

Monotype Metal Cleaner saves money—*big money*—in two ways:

First: It reduces to the minimum the losses due to melting, and at the present prices of metal you cannot afford not to use it.

Second: By insuring perfectly clean, uniform metal it eliminates all metal troubles; by saving time at the casting machine it increases output. *You can cast perfect shaded type from ordinary metal, cleaned with our cleaner, without the addition of tin.*

Each Can Contains Two Pounds of
Cleaner, Sufficient to Clean
12,000 Pounds of Metal

LANSTON MONOTYPE MACHINE
COMPANY, PHILADELPHIA