

MONO TYPE

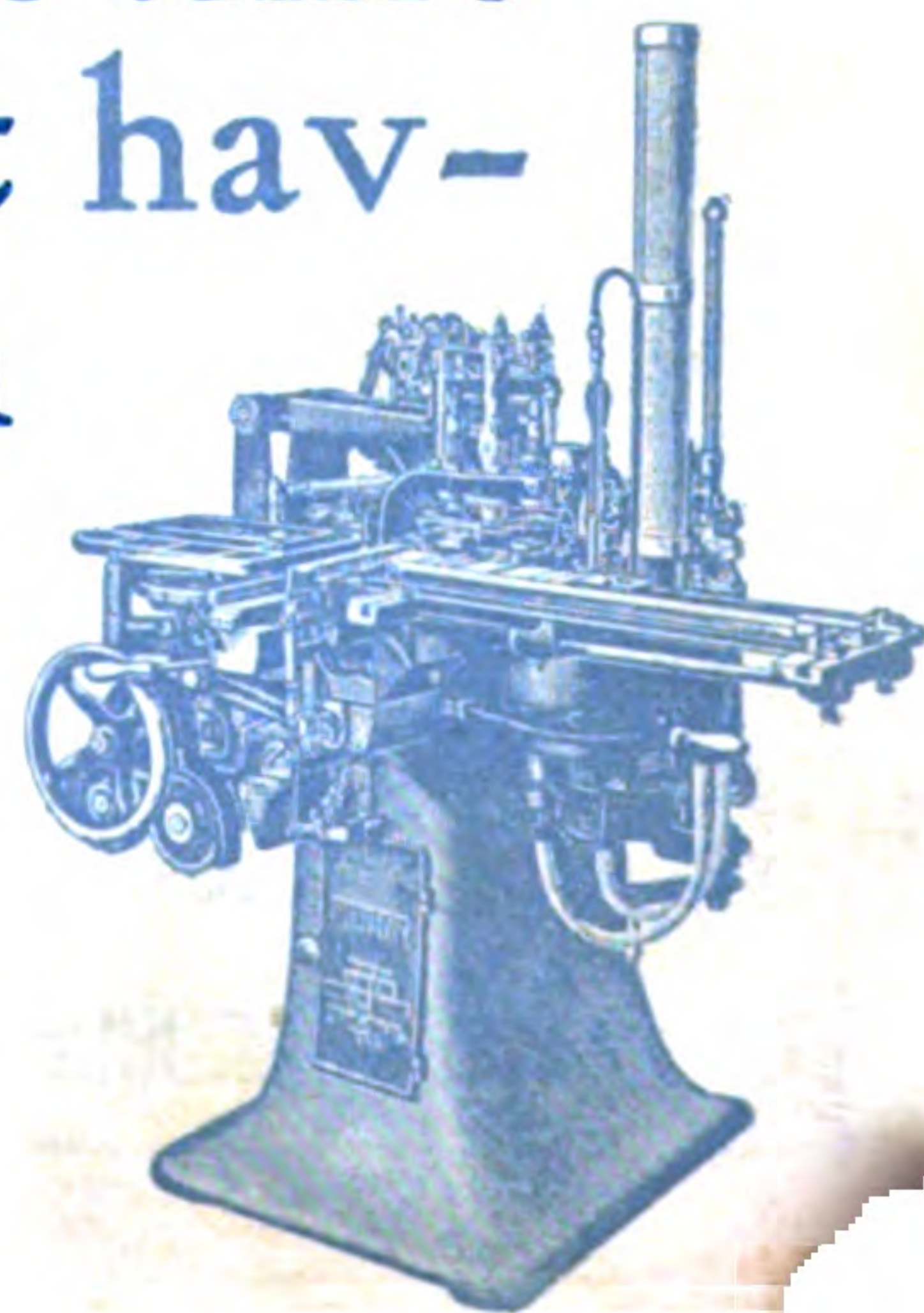
F. B.

A Journal of Composing Room Efficiency

LANSTON
MONOTYPE
MACHINE
COMPANY

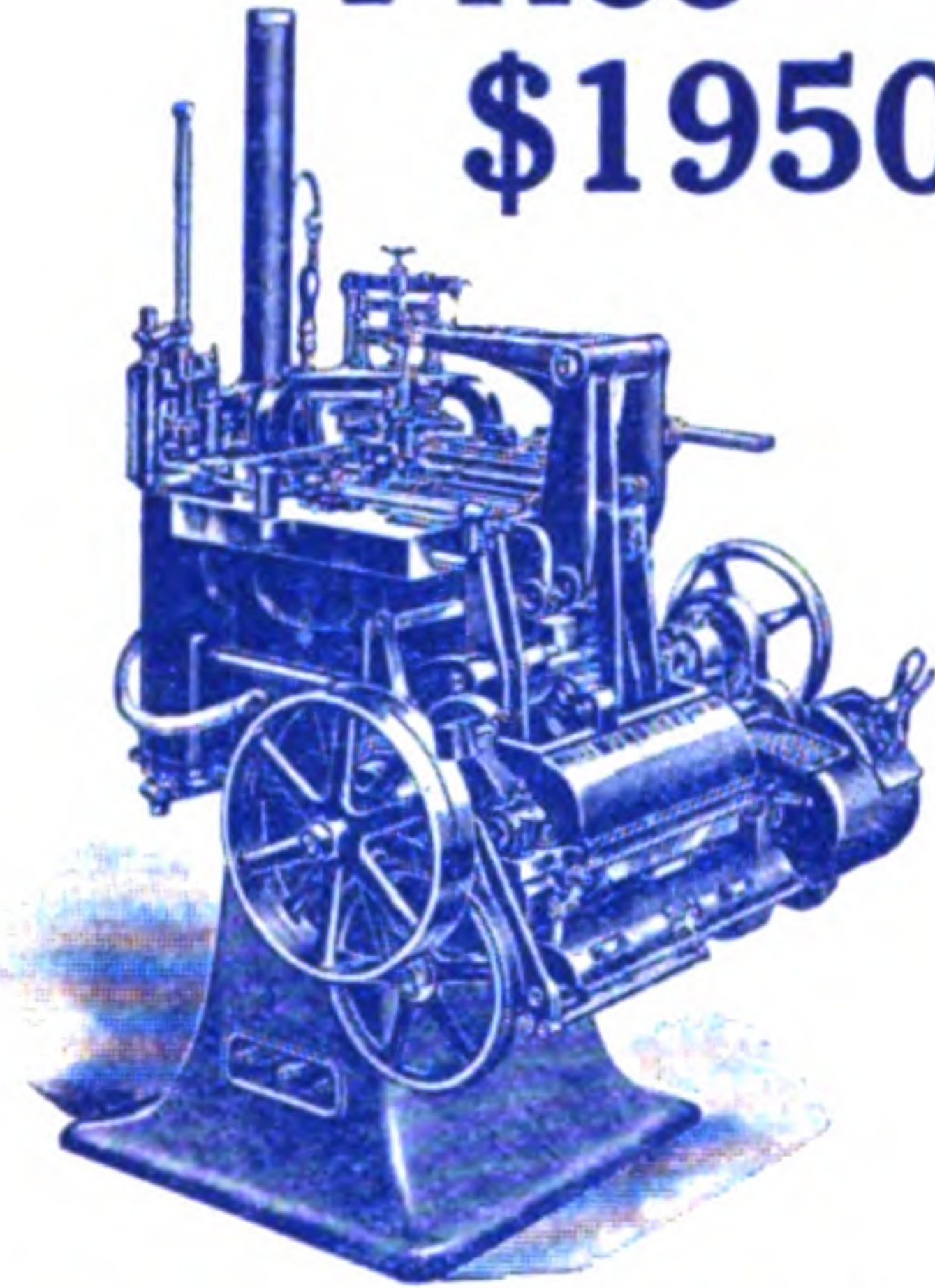
PHILA
DELPHIA

The ability to give your customer what he wants is worth a lot more than the time you save by not having to argue him into being half-satisfied with what you can give him.



Why Distribute? New Type is Cheaper

**Price
\$1950**



Price includes molds for casting type, high and low quads and spaces in 6, 8, 10, 12, 14, 18, 20, 24, 30 and 36 point.

Non-distribution means increased efficiency. It means more inches of display ads per man per hour on the stone. It means less labor cost per inch. It means new type every day.

The Monotype is the only Type Caster that makes type so rapidly and so economically that it costs less to make new type than to distribute used type.

The Monotype is "the machine with the matrices." Over 1050 fonts of the best type faces for rental on the Matrix Library plan at a cost of \$1.67 per font.

"Has-made-good beats just-as-good"

Some newspapers making all their type in their own plants on Monotypes

New York World
New York Times
New York Evening Post
New York Mail and Express
Globe and Commercial Advertiser, New York
New York Evening Journal
New York Sun
Buffalo Evening News
Observer, Hoboken, N. J.
Omaha Daily News, Omaha
Dispatch, St. Paul
Daily News, St. Paul
Minneapolis Journal
Springfield, Mass., Union
Springfield, Mass., Daily News
Lynn Telegram
Lynn Item
Hartford Times
Washington Evening Star
Washington Post
San Antonio Express
Salt Lake Tribune
Seattle Star
Oklahoman, Oklahoma City
News-Leader, Richmond
Virginian Pilot, Norfolk
Jeffersonian Gazette, Lawrence, Kansas

Boston Post
Boston American
Boston Herald
Boston News Bureau
Boston Globe
Evening Journal, Jersey City
Cortland, N. Y., Standard
Every Evening, Wilmington, Del.
Atlanta Journal
Daily Calumet, Chicago
Decatur Herald
Courier Journal, Louisville
Louisville Herald
Daily States, New Orleans
Item, New Orleans
Sentinel, Waterville, Maine
Pittsburgh Gazette-Times
Press, Pittsburgh
Houston Chronicle
Beaumont Enterprise
Metropolis, Jacksonville
Item, Richmond, Ind.
Monitor-Statesman, Concord, N. H.
World, Bloomington, Ind.
Woburn Journal, Woburn, Mass.
Democrat, Dover, N. H.
State Journal, Lincoln, Neb.

Chicago Journal
Chicago Tribune
Chicago Staats Zeitung
Public Ledger, Philadelphia
German Daily Gazette, Philadelphia.
Record, Philadelphia
Cleveland Leader-News
Cleveland Plain Dealer
Cleveland Press
Cincinnati Enquirer
Cincinnati Post
Columbus Dispatch
Toledo Blade
Republican, Hamilton, Ohio
Gazette, Montreal
Herald, Montreal
Financial Times, Montreal
Phoenix, Saskatoon
Daily News, Brandon, Man.
Bulletin, Edmonton, Alb.
Post, Sydney, N. S.
News, Truro, N. S.
Free Press, London, Ont.
Sentinel Review, Woodstock, Ont.
Standard, Saskatoon
Royal Gazette, Hamilton, Bermuda

Let us send you our new Specimen Book

THE word MONOTYPE means much more than the name of a machine; it includes a complete system of composing room practice based on the work of the Monotype both as a composing machine and as a type caster.

MONOTYPE

A JOURNAL OF COMPOSING ROOM EFFICIENCY
*Published Monthly by LANSTON MONOTYPE MACHINE COMPANY,
PHILADELPHIA, and mailed free to interested printers, publishers and advertisers*

VOLUME 1

JUNE-JULY · 1913

NUMBER 3

Make-up in the Book Office

BY H. A. WISOTZKEY

President of the Maple Press, York, Pa.

PROBABLY there is no department of the printing business that will pay a greater return on the investment of a little study and systematization than make-up in a book office. Not so many years ago it was the fashion to refer to the composing room as the sink-hole of the printing business and it seems to me that many employing printers to-day have the same attitude toward make-up; a necessary evil that must be endured because it cannot be cured. A compositor enters the office, announces that he is an A-1 make-up, the boss welcomes him with open arms, puts him to work and congratulates himself that he has solved the make-up problem.

From my point of view, an ex-make-up, now manager of a book office, there is, strictly speaking, no such thing as a make-up man, because I have found it more profitable to consider making-up as a team work proposition in which the whole composing room plays a most important part. Certainly the compositor who assembles and ties up pages is not *the* make-up, he is simply the centre of the make-up system. I remember an occasion when, to make an important delivery, it was necessary for the boss to take off his coat and help make-

up. Another man and I working together made up seven hundred and twenty pages in twelve hours. As I remember the offices in which I used to work as a make-up, we could not have done one-third of this, because it seemed to me that at least half of my time used to be spent in hunting up instead of making-up.

Scientific management is a word to conjure with to-day, and both the technical and popular magazines are full of reports of the wonders wrought by what seems, after all, to be the result of concentrating attention and horse sense on one manufacturing problem at a time. Particularly interesting are the results accomplished by the scientific managers through motion study; that is, by timing and even taking motion pictures of the employee at work, in order to discover and eliminate useless motions. Now if there is any job in the world worthy of motion study it is the work of the compositor on making-up book pages.

Blissfully ignorant that I was doing anything "scientific" I was forced to study our make-up and cut out useless motions because I did not have the room for men to make useless motions in. We produce

Every type in MONOTYPE up to and including 36 point is Monotype Type, Faces, Borders, Ornaments and Spacing Material.

wide spacing attachment to indicate slug composition, by increasing the white space between letters and words, they can obtain on the same Monotype, from the same matrices and mold, for the same operator effort, from fifteen to twenty per cent more output when this product is measured with the em of the point size.

They now understand the absurdity of comparing slug output records with type output records without regard to the number of letters and spaces per thousand ems. They realize, as Mr. Passano says, that the man who measures his output with the em of the point size is quite as inaccurate as a carpet salesman who estimates the number of yards of carpet to cover a floor without considering the width of the carpet to be used.

Briefly, the rational, or set ems, system of measurement is based on the axiom "Things equal to the same things are equal to each other." Thus, two faces are the same for the purpose of measurement (have the same set) when the same matter set in the same measure with the same size spaces runs line for line in both faces. Consequently, when once a type or slug face has thus been compared with a Monotype face and its set determined, it is just as easy to keep records of output of this type or slug face in set ems and, what is even more important, to estimate on new work in set ems as if this type or slug face *were* composed on the Monotype. All

Mr. John Clyde Oswald, President, American Printer:

I entirely approve of Mr. Passano's suggestion. The old system of measuring composition by the em of the body persists merely because it is the old system. I have seen the arguments presented against it previously, but never so well. There should be a reform and I hope his paper will be instrumental in starting the movement.

Mr. Daniel Baker, Manager of the Graphic Arts Board of Trade of Toronto:

Mr. Passano has done the craft a service in calling attention to the availability of the Monotype measurement for the purpose of equalizing and reducing to the average the fat and the lean. The hitherto impossible has been made not only possible, but practical, by the set ems system of the Monotype, and the printer and his customer now have for the first time a really scientific standard of measurement of the effort involved in the production of plain matter and book work, no matter what face of type is needed to meet the exigencies of publication. The very simplicity of the thing makes one wonder why it was not thought of sooner. It is a big step forward, and the offer of the Monotype people to "Standardize," as it were, every face sent them will be a big help in bringing the idea into early use.

Mr. A. E. Davis, General Secretary of the Pittsburgh Typothetae:

I know something of Mr. Passano's ability in such matters, and regarding his "Rational System for Measuring Composition" I can only say that I endorse it fully. His paper is one of the most important contributions to the literature of scientific management, as applied to printing plants, that I have seen in many a day.

that is required to use the Monotype table for changing pica ems to ems of any set is to know the set of the face and the measure in picas.

We hold no brief for the buyer of printing; it is not within the province of the manufacturer of machinery to discuss the prices at which the product of his machine is sold. He owes it to his customers not to make extravagant claims for low production costs to be used by buyers of printing to beat down the price of printing. We do not say quote a lower price because you use a fat face, but we do insist that you who obtain your work on a competitive basis should know what you are selling before you quote a price. If you do not, you will get the lean jobs and the other fellow will get the fat.

The value, the what-you-get-for-your-money, varies quite as much in composition as in paper: Is it not time that printers, like paper makers, sell by sample? Is it not time to stop selling composition by that absurd measure the em of the point size and say "My price for a page like this is so much?"

While we believe Mr. Passano's paper to be a fundamental part of the splendid work of the cost movement, we felt that we should not publish an article of such far reaching importance without first obtaining the opinion of those best qualified by experience in cost work. It is indeed a pleasure to print the following extracts from some of the many letters we have received:

Mr. F. H. Gilson, President, Stanhope Press, Boston:

Unquestionably the cost of a page of composition is measured by the time or effort put into it, and that bears a very close relation to the number of pieces of type contained in it. I agree with Mr. Passano absolutely. It is truly ridiculous to measure by the thousand ems regardless of how many pieces of type and consequent effort is contained therein. I trust that all printers will soon recognize the true condition of affairs and adopt a system of measurement which measures effort and consequent worth.

Mr. Fred Boardman, Superintendent of Printing, Canadian Government Printing Office:

The "Rational," if applied in connection with cost accounting and the checking of output on machines, I believe will be found most equitable to both the employer and the machine operator. This system has been in use in our Monotype division for some time. I am quite pleased to note the evident interest you take in all matters pertaining to the printing industry, and particularly in the furtherance of efficiency.

Mr. Thomas E. Donnelley, President, R. R. Donnelley & Sons Co., Chicago:

I have read with considerable interest the article by Mr. Passano in the *Inland Printer*. For a long time I have realized that we were not selling composition by the number of words and that customers were not always paying for what they were receiving. You are to be congratulated upon starting the printers of this country thinking about this, and I sincerely hope that something can be accomplished in establishing the new and accurate system of measuring composition.

A Rational System for Measuring Composition

By EDWARD B. PASSANO, President of Williams & Wilkins Co., Baltimore.

(Reprinted by permission from the Inland Printer for July.)

SPEAKING broadly, cost records are kept for two purposes: *First*, to be able to tell before a job is taken what price to charge to make a profit on it; *Second*, to be able to tell after the job is delivered whether a profit was made—whether the estimate was right. *An estimate that is too low means the loss of money; an estimate that is too high means the loss of the job and the money that might have been made out of the job.*

Now the prime factor in estimating on anything, from putting carpets on floors to putting printing ink on paper, is determining the amount of work that must be done. A man who could not measure accurately would not long hold a job in a carpet store, where mighty little carpet is worth \$5.00 a square yard.

Printers have been unable to estimate accurately the cost of composition, for there has been no accurate system of measuring composition, and yet there is mighty little composition that is not worth more than \$50.00 a square yard.

The system, or rather complete lack of system, of using the em of the point size of the face to measure composition is ridiculous and comment would be superfluous but for the important fact that this method is universally used.

When composition is measured with the em of the point size of the face, no consideration whatever is given to whether the face used is fat or lean. Type faces of the same point size vary more in width than carpet does. How long would a carpet estimator last who assumed that all carpet was the same width, and in figuring the number of yards to cover a floor, paid no attention to the width of carpet for the job on which he was estimating?

A dollar represents the same amount of value whether you pay the dollar in quarters, dimes, nickels, or pennies.

What does a thousand ems represent? Does a thousand ems of twelve point represent the same value (amount of work) as a thousand ems of six point? *Why, there is often a difference of more than thirty per cent in the value of two different thousand ems of the same point-size type.*

Here are three eight point faces:

abdefghijklmnopqrstuvwxyz	{ Length of lower case alphabet }	11.23	8 Pt. Ems.
abdefghijklmnopqrstuvwxyz	{ Length of lower case alphabet }	12.83	“ “
abdefghijklmnopqrstuvwxyz	{ Length of lower case alphabet }	14.42	“ “

The fattest of these faces will set almost thirty per cent faster than the leanest, and the operator of a composing machine when setting the fattest of these faces will produce thirty per cent more ems in the same time than when setting the leanest; *and this on setting identically the same matter—striking exactly*

the same keys. And yet, in obtaining output records upon which to base estimates, how many printers give any consideration whatever to whether the faces used be fat or lean?

It is obvious that in selling printing, selecting the most profitable face for the job is of the utmost importance, and this is becoming more important as editions grow larger. In much work the saving in paper and press work effected by using a suitable condensed face and spacing closely adds a very handsome profit, while, when composition is sold by the page, the advantage of using a fat face and wide spacing should not be overlooked.

Whether, therefore, you charge composition to the completed job at a rate per hour, or a rate per thousand ems, you must know your average output per hour, based on a system of measurement that really means something, if your cost records are to be of any real value.

The prime object of a cost system is to enable you to sell at a profit—to give you the data to estimate accurately on new work. It is absurd to spend money on a cost system to get accurate hour costs, and then, in estimating, throw away all this advantage by figuring on the totally false assumption that all kinds of matter, set in fat or lean faces, can be produced at the same average number of ems per hour. What can be more foolish than giving the buyer of printing, who says, “I do not care for quality and will not pay for it,” more words to the page than your competitor does, unless by more closely setting the job you can make fewer pages and save paper and press work.

It is a fundamental principle of arithmetic that before any quantities are added to obtain an average they must be reduced first to the same denomination; you cannot add inches to feet and call the result either feet or inches; first you must express the quantities to be averaged in feet or in inches.

In the same way composition output records must be reduced to a common basis before they are averaged. Proper allowance must be made for whether the faces be fat or lean. How shall this allowance be made?

It is clear to all who have studied this question that the generally accepted standard for comparing faces, the length of lower-case alphabet, is too inaccurate to be of any real help in solving this problem. Indeed, in the old days of piece work on hand composition faces that looked fat by this standard but set skinny, because the most frequently used letters had been made condensed, were a constant source of irritation. If scientific management means scientific measurement, it is clear that any system of measurement to be acceptable today must take cognizance of something more definite than the alphabet length.

The monotype keyboard furnishes the ideal measuring instrument upon which to base an accurate system of measurement because this keyboard is both a measuring and adding machine. As each letter and space is struck its width is measured and recorded so that, after a line is set, the keyboard indicates exactly the number of ems in the line. To those not familiar with the monotype system the following will be of interest:

In using the keyboard the operator sets the measure not to the measure in pica ems as a compositor sets his stick, but to the equivalent, in picas, of this measure in ems of the "set" of the face to be composed. The conversion of pica ems to ems of any set is quickly made by using a table calculated for all sets.

In the monotype system "set" is the measure of a face "linewise" and tells exactly how condensed or extended the face is. Referring to the three eight point alphabets, on page 51, the first, or most condensed, of these belongs to a seven-set monotype face; seven-set because the widest character used with this face is seven points wide. The second alphabet is eight-set, while the third, most extended, is nine-set. Thus, in composing matter seventeen picas wide in the most condensed of these faces, the monotype operator sets his keyboard measure to twenty-nine and one-sixth ems because this table for converting picas into ems of any set tells him that twenty-nine and one-sixth ems (widest characters) of this face is exactly seventeen picas wide.

The possibilities of using the "set" of a face as a basis for accurately measuring the amount of effort required to compose a required number of square inches of this face will be clear from the following specimens of monotype composition. Bear in mind that to use this same system of measurement for hand-set foundry type, or any other process of composition, we have only to first determine the "set" of the face we wish to measure accurately.

In the old system of measurement ("traditional" measurement) the amount of matter set is expressed in ems of the point size, the result of multiplying the measure in ems of the point size of the face by the number of lines set; the rational system of measurement gives the product in "Set Ems," that is the measure *in ems of the set of the face* multiplied by the number of lines.

These specimens also show clearly the folly of measuring output with the em of the point size of the face as a "yard-stick" ("traditional" measurement), regardless of whether the face be fat or lean; because, with the exception of the quads required to finish the last line of the paragraph, the operator made the same effort, struck the same keys, in setting each specimen; the width in all cases is eighteen and one-half picas.*

*For the purpose of accuracy in these calculations, the fractions of the ems have been considered, but the usual habit should be followed in compiling statistics of not considering less than an em, dropping the fraction when less than one-half, and counting the next whole em when one-half or over.

Figure 1

The best kind of originality is that which comes after a sound apprenticeship; that which shall prove itself to be the blending of a firm conception of useful precedent and the progressive tendencies of an able mind. For, let a man be as able and original as he may, he cannot afford to discard knowledge of what has gone before or what is now going on in his own trade and profession. If the printers of today do not wish to be esteemed arrogant, when they term this calling of theirs an art, they must be willing, and show that they are willing, to subject it to such laws as have made its sister arts so free.

8 pt. 1A. (7 set) = 9 lines

Measure 18 picas (27 ems of 8 pt.); Traditional measurement = 243 ems

Measure 18 picas (30½ ems six units of 7 set); Set Ems measurement = 277½ ems

The first specimen, Fig. 1, is set in a seven-set face, the keyboard measure is thirty and one-half ems six units (⅓ em); multiplying this by the number of lines (9) gives 277½ *real ems*, of this face, or "Set Ems," the name for the output measured *in ems of the set of the face* in which the matter is composed. But according to tradition this amount of matter should be called 243 ems, because eighteen picas equals twenty-seven ems of eight point and the matter makes nine lines (27×9=243).

Figure 2

The best kind of originality is that which comes after a sound apprenticeship; that which shall prove to be the blending of a firm conception of all useful precedent and the progressive tendencies of an able mind. For, let a man be as able and original as he may, he cannot afford to discard knowledge of what has gone before or what is now going on in his own trade and profession. If the printers of today do not wish to be esteemed arrogant when they term this calling of theirs an art, they must be willing, and show that they are willing, to subject it to such laws as have made its sister arts so free.

8 pt. 14A (8 set) = 10 lines

Same matter as Fig. 1

Measure 18 picas (27 ems of 8 pt.); Traditional measurement = 270 ems

Measure 18 picas (27 ems of 8 set); Set Ems measurement = 270 ems

The next specimen, Fig. 2, is set in an eight-set face and measures 270 "Set Ems," also 270 point-size ems; the same number of ems by both systems of measurement because an eight-set em is eight points wide.

Figure 3

The best kind of originality is that which comes after a sound apprenticeship; that which shall prove to be the blending of a firm conception of all useful precedent and the progressive tendencies of an able mind. For, let a man be as able and original as he may, he cannot afford to discard knowledge of what has gone before or what is now going on in his own trade and profession. If the printers of today do not wish to be esteemed arrogant when they term this calling of theirs an art, they must be willing, and show that they are willing, to subject it to such laws as have made its sister arts so free.

8 pt. 5A (9 set) = 11 lines

Same matter as Figs. 1 and 2

Measure 18 picas (27 ems of 8 pt.) Traditional measurement = 297 ems

Measure 18 picas (24 ems of 9 set); Set Ems measurement = 264 ems

The third specimen, Fig. 3, is a nine-set face and, as shown beneath the specimen, this amount of matter is 264 "Set Ems," or 297 traditional ems.

Thus, if we use the "Set Ems" system of measurement the same words, the same number of key-strokes on a composing machine, make practically the same number of ems. But, if we use the "traditional" measuring system, based on the point size of the face, the variation in measurement for the same amount of effort is as follows:

8 pt. 1A (7 set) = by Set Ems, 277½; by "tradition," 243 ems
 8 pt. 14A (8 set) = by Set Ems, 270; by "tradition," 270 ems
 8 pt. 5A (9 set) = by Set Ems, 264; by "tradition," 297 ems

Thus, by "Set Ems" measurement the maximum difference in measurements is thirteen and one-half ems, by "traditional" measurement the difference is fifty-four ems.

Before the "Set Ems" system of measurement can be used it is, of course, necessary to know the "set" of the face to be measured, in order to convert any measure in picas into ems of the set of the face by using the monotype table for changing pica ems to ems of any set.

The monotype specimen book gives the "set" of all monotype faces and we may determine the "set" of a type or slug face by matching it with a monotype face, the "set" of which is known. It is clear that if two faces set line for line on the same matter, in the same measure, they must be of the same "set" and that the same operator effort, the same number of key-strokes, will be required to compose the same number of "Set Ems" in either of these faces, whether the operator uses a monotype or a slug machine. Thus, the "set" of a type or slug face may be determined by composing in this face the same matter as is used in the monotype specimen book—"The best kind of originality is that which comes after a sound apprenticeship; etc."—and then finding from the monotype specimen book the "set" of the monotype face that runs line for line with this test specimen.*

The monotype keyboard may be used as a measuring machine to determine the "set" of any foundry or slug face; that is, to find from a printed specimen the "set" of the monotype face that will run line for line with this face, on the same matter in the same measure. The following explanation of this method for finding the "set" of a face is of interest, but it should be noted that once a face is measured and its set determined this work need never be repeated for that face.

To find the set of any face from a printed specimen, set ten full lines (no lines containing quads) on the monotype keyboard to determine the number of ems and fractions of an em (units) in each line. Of course fixed size spaces, not justifying spaces, of

*In determining the set of a face by comparison always refer to monotype Roman faces that are on Arrangement C. It is a simple matter on the monotype to combine in the same matrix case, and therefore to compose together, a condensed Roman and an extended Boldface because the Boldface matrices are placed in the matrix case in positions that produce much wider characters than the corresponding Roman letters. To facilitate making these combinations the Monotype specimen book always gives, for faces not on Arrangement C, the set of the Roman face with which this Boldface will combine; that is, the set of the justifying scale to use in composing the Boldface shown—for example eight-point 11J, Arrangement C2, Boldface is listed as an eight and one-half set face. For the purposes of measurement this Boldface is in reality a nine and three-quarter set face because it will compose line for line with a nine and three-quarter set Roman face on Arrangement C.

the same width as the spaces in the printed specimen must be used. From the number of ems and units in each of these ten test lines obtain the average number of ems and units per line. Measure the width of the specimen in picas with a type rule. In monotype system, a face that has its widest character one pica wide is twelve set; therefore, by simple proportion, the old rule of three of arithmetic, we can find the set of the face tested on the keyboard because we have (a) the average number of ems and units per line, (b) the measure in picas, (c) twelve, the set of a face that would give as many ems to the line as the measure in picas. We can express this relation as follows:

$$\text{Set of face tested on keyboard} = \frac{\text{Measure in picas} \times 12}{\text{Number of ems to the line}}$$

Suppose that the average number of ems to the line of the face tested was twenty-three and that the matter tested was seventeen and one-half picas wide. Then the set of this face would be 9.13, or nine and one-quarter set; the table for changing pica ems to ems of any set gives the difference in faces by quarter sets.*

$$\frac{17\frac{1}{2} \times 12}{23} = \frac{210}{23} = 9.13$$

In thus determining the set of faces it is essential to take into account the necessary wide spacing of slug machine faces. In monotype composition, as in hand work, the spaces between words are proportional to the size of the face. In slug faces the same size spaces are used with all faces and consequently the spaces in six-point slug composition are twice as wide as in hand composition. Therefore in using the keyboard to determine the set of a hand-set face use six-unit spaces between the words of the test lines set on the keyboard; for a slug face use twelve-unit spaces.

To be fair to yourself, to be just to your operators, if you keep your records in "Set Ems" never talk about your ems per hour or compare your records with those kept in the "traditional" way until you have first converted your "Set Ems" into the "traditional" ems of the point size. To do this, increase your output statements by not less than twenty per cent. This is essential in comparing foundry type and monotype records with slug machine output because few, if any, slug machine faces are so condensed that their "set" is equal to their point size and also because of the necessary wide spacing of these faces.

By using "Set Ems" in estimating you automatically make proper allowance for fat and lean faces. A job is to be set in eight point, twenty-one picas wide, sixty lines to the page. If a nine-set face be used each page will make 1680 "Set Ems," for the table for changing pica ems to ems of any set shows that twenty-one picas equals twenty-eight ems of nine-set (28×60=1680). If your records show that your composing machines average 3600 "Set

*For those who have not access to a keyboard the Monotype Co. will determine the set of any face, twelve point and smaller, without charge, upon receipt of a page of composition in this face.

Ems" per hour (60 "Set Ems" per minute) the time required for this page will be twenty-eight minutes ($1680 \div 60 = 28$). If, instead of a nine-set you use an eight-set face there will be 1890 "Set Ems" per page ($21 \text{ picas} = 31\frac{1}{2} \text{ ems of eight-set: } 31\frac{1}{2} \times 60 = 1890$) and thirty-one and one-half minutes will be required to set a page ($1890 \div 60 = 31\frac{1}{2}$) Thus, your price on the eight-set face should be twelve and one-half per cent higher than on the nine-set if your composing machines maintain the same rate of profit.

But by far the greatest advantage of keeping output records in "Set Ems" is that it keeps constantly before you the profit—or loss—in type faces. It almost forces you to furnish the face that will give you the greatest profit on the job you are estimating on. If the edition be large you make an additional profit by saving on paper and press work, selecting a suitable condensed face and setting it close spaced. If the composition is sold by the page you use as fat a face as possible and make sure that it is wide spaced. In short, if you are in competition you furnish no more words to the square inch than your competitor does unless you get paid an extra price for furnishing an article that costs more to produce.



It Couldn't Be Done

Somebody said that it couldn't be done,
But he with a chuckle replied:
That "maybe it couldn't," but he would be one
Who wouldn't say so till he'd tried.
So he buckled right in, with a trace of a grin
On his face. If he worried, he hid it.
He started to sing as he tackled the thing
That couldn't be done—and he did it.

Somebody scoffed: "Oh, you'll never do that—
At least no one ever has done it;"
But he took off his coat and he took off his hat,
And the first thing we knew he'd begun it,
With a lift of his chin and a bit of a grin,
Without any doubting or quiddit.
He started to sing as he tackled the thing
That couldn't be done—and he did it.

There are thousands who will tell you it cannot be done,
There are thousands who prophesy failure;
There are thousands to point out to you, one by one,
The dangers that wait to assail you.
But just buckle in with a bit of a grin,
Then take off your coat and go to it.
Just start in to sing as you tackle the thing
That "cannot be done"—and you'll do it.

—Edgar A. Guest.



The New Canadian Offices of the Monotype

IN no part of the world is "the versatile machine" more appreciated than in Canada, where sixty per cent of all the Monotypes in use have sold themselves on repeat orders. We doubt whether any other manufacturer of printing machinery can show such a record of enthusiastic customers.

"Machines are known by the companies that keep them," and while it is quite impossible to publish in "Monotype" a complete list of our Canadian customers we mention a few who have given the Monotype the strongest possible endorsement—Repeat Orders: Canadian Government; Southam Press (both Montreal and Toronto); Gazette Print-

ing Company, Montreal; The Herald Company, Montreal; The Bell Telephone Co. of Canada, Montreal; C. R. Corneil, Montreal; Mortimer Company, Ottawa; Bryant Press, Toronto; The T. Eaton Company, Toronto; The Hunter Rose Company, Toronto; R. G. McLean, Toronto; Murray Printing Company, Toronto; Barnes & Company, St. John; Wm. Macnab & Son, Halifax;



Monotype Offices in The Lumsden Building, Toronto

A. Talbot & Company, London; The Farmers Advocate, Winnipeg; Stovel Company, Winnipeg; Public Press, Winnipeg; The Standard Publishers, Regina; Saturday Press, Saskatoon.

To give our friends in Canada exactly the same service that has made our reputation for service in the United States, we have taken offices in the Lumsden Building in Toronto and Mr. H. F. McMahon, for several years assistant to our President, has been appointed Canadian Manager.

We record our appreciation of the successful efforts of our former selling agents, Messrs. Miller & Richard of Toronto. Through them we have made many new friends throughout Canada and for these we are especially grateful. We look forward to meeting all of our Canadian friends at our Canadian office and hope that they will make the Lumsden headquarters when in Toronto.

The Operator Problem

AS soon as a printer begins to think about installing his own composing machines his dreams are haunted by that nightmare "the operator question." He has heard at the local organization meetings and at the cost congresses stories from his fellow printers about the scarcity of competent men, their independent attitude, their demand for high pay, their propensity to move on to the next town.

Let us get down to brass tacks and see just what the operator problem is on the Monotype.

Too many employers make the mistake of judging the Monotype by their experience with other kinds of machinery. They say: "I am in the printing business, not conducting a school. I don't propose to spend my money teaching people the business. I pay good wages and I want only experienced operators." It is worth a lot of money in increased efficiency to such employers to forget their prejudice and see exactly what home teaching means.

The Monotype Company has always advised and urged its customers to use their own home people on the keyboard, because all our experience proves that printers who are familiar with the work of the office and the requirements of its customers make the most efficient operators. It seems only fair, too, that they be given the opportunity of proving their ability.

No simpler machine has been offered to the printing trade than the Monotype keyboard. It is not more complicated or more difficult for a compositor to learn to operate than an adding machine, and surely no printer who bought an adding machine would think of replacing his book-keeper with an adding machine expert.

The compositor who goes to the Monotype keyboard has only one thing to learn—how to finger the keys correctly in order to obtain the maximum output with the minimum of effort. He need know nothing of mechanics or of metal. He does not have to learn how to set type; he learned that at the case. With two days' instruction he can do on the keyboard any kind of composition he can do at the case. In fact, an ambitious compositor who has never set tabular matter may become proficient on that work with no other instruction than the explanation and exercises in the chapter on tabular matter in our book "The Monotype System."

Now comes the exclusive Monotype advantage possessed by no other composing machine. The key arrangement of the alphabets is exactly the same as any standard typewriter; but do not get the impression that because the Monotype has the same key arrangement as a typewriter it is a machine for stenographers to operate. This is the height of absurdity. The Monotype keyboard is simply a device to multiply the typographic skill of its operator. Thus, five times zero is still zero and the operator who has no skill as a compositor at the case can accomplish nothing on the keyboard.

To learn to finger the keys correctly, therefore, the compositor rents a typewriter and practices

at home. He need lose no time from work and is at no expense save a nominal rental for the typewriter. For this practice the Smith-Premier is the best adapted because like the Monotype it has the straight line key arrangement and no shift key. Many successful operators have thus acquired speed on the Monotype before they ever sat down to a keyboard.

To further assist operators in learning at home, the Monotype Company has just issued a most complete book on fingering, "Operating the Monotype Keyboard." This book contains all the instructions and the necessary practice copy. It is fully described on page 61 of this issue of "Monotype."

It is to the credit of the International Typographical Union that in practically all cities an apprenticeship scale has been provided for the learners on composing machines. This means that a compositor who has learned at home to finger the Monotype keyboard correctly can at once deliver the equivalent of his learner's pay.

As a further inducement to employers to give their own home people an opportunity to make good on the keyboard, it is the policy of the Monotype Company to lend to Monotype users at a purely nominal rental extra keyboards for the use of these learners. Did anyone ever hear of a manufacturer of slug machines, or printing presses, or any other printing office equipment, lending machines so that the employees of an office might fit themselves in that office to become machine operators?

Thus the "operator problem", when analyzed in connection with the Monotype, becomes no problem at all. The employer has only to learn that the fundamental principle of efficiency, the keystone of American success in manufacturing, is the wider use of the competent man already in his employ.

In addition to encouraging home instruction by lending machines, the Monotype Company has in Philadelphia a free school for compositors equipped with twenty-eight keyboards, described and illustrated in "Monotype" for April. In St. Louis the Monotype Company, in connection with the Typographical Union, maintains a similar school that has been most successful. (See page 62 of this issue.)



Some Fast Work

The following item is clipped from the Daily Evening Sun, East St. Louis, Ill., July 18:

F. N. Bradshaw, an expert Monotype operator, gave an exhibition of speed on the Monotype keyboard for the benefit of the mechanical superintendents of the various St. Louis newspaper plants, Thursday night at the St. Louis Monotype School, Tenth and Olive Streets, St. Louis. Mr. Bradshaw sat at the keyboard for one hour and at the end of that time it was found that he had set 14,000 ems. This is a speed of about 135 words a minute. The average typewriter expert writes about 100 words a minute.

There are *two kinds* of Co

SLUG COMPOSITION

Reproduced line for line as done by the slug machine. Note the characteristic white space between letters and the necessary wide spacing. At best—type composition diluted with space between letters and words.

Exhibit A—12 Lines

Answer.—There is no trick about it at all. All the wide measure matter in each issue of THE LINOTYPE BULLETIN is set by means of twin slugs. In the January issue referred to the measure was 41 ems, and was composed of two 20½-em slugs. This month the measure is 38 ems, and is composed of two 19-em slugs. By the exercise of only reasonable care any competent operator can secure the same results. In fact, specimens of wide measure Linotype work are constantly being sent us, many of them three or four slugs in width, all equally good examples as THE LINOTYPE BULLETIN. It is merely a matter of being careful on the part of the operator.

Exhibit A is set in 8 point Elzevir Slug Face with this lower case alphabet: abcdefghijkl

Exhibit B is set in 8 point 22E Monotype Face with this lower case alphabet: abcdefghijkl

“SLUG CO

Done by the Monotype equipment but even to slug composition the distinction and wearing quality are separately.

Exhibit B

Answer.—There is no wide measure matter in each issue of THE LINOTYPE BULLETIN is set by means of twin slugs. In the January issue referred to the measure was 41 ems, and was composed of two 20½-em slugs. This month the measure is 38 ems, and is composed of two 19-em slugs. By the exercise of only reasonable care any competent operator can secure the same results. In fact, specimens of wide measure Linotype work are constantly being sent us, many of them three or four slugs in width, all equally good examples as THE LINOTYPE BULLETIN. It is merely a matter of being careful on the part of the operator.

The elastic Monotype makes the face fit the space: Same composition—for cheap work the paper-covering quality of spaced type, brand new for every job. Monotype quality m

A NEW IDEA in machinery has been embodied in the latest construction of the MONOTYPE, for, like “elastic” book cases, modern filing cabinets and composing room furniture, the Monotype is built up of units which may be combined to suit the needs of each individual printing office. Thus, the MONOTYPE user can build up his equipment to suit his business exactly, since he can buy just the units required to fit his individual needs—the printer who chooses Monotypes uses “made-to-order” machines.

EXHIBIT D—Eleven lines of a Monotype face (10 point 8A combined with 11J) cast on its minimum set (10) to give the closest fitting—the minimum space between letters. This is Monotype Quality, the cream of composition, the maximum number of words to the square inch—equivalent to brand new foundry type set by hand.

A NEW IDEA in machinery has been embodied in the latest construction of the MONOTYPE, for, like “elastic” book cases, modern filing cabinets and composing room furniture, the Monotype is built up of units which may be combined to suit the needs of each individual printing office. Thus, the MONOTYPE user can build up his equipment to suit his business exactly, since he can buy just the units required to fit his individual needs—the printer who chooses Monotypes uses “made-to-order” machines.

EXHIBIT E—Twelve lines cast from the same matrices used for Exhibit D (at the left). Setting identically the same matter, the proprietor, by telling the operator to use the wide spacing attachment, adds a line (almost 10 per cent) to the output for the same number of keystrokes. The letters are as close fitted as in Exhibit D.

The milkman sells two kinds of product—cream and milk—but he does not keep two kinds of cows.

The telegraph companies invented night letters to sell their surplus product without affecting the price of their quality product.

Buy the Monotype Be

Composition: *Type* and Slugs

POSITION"

with wide spacing attachment; Monotype adds the typographic on the press of letters cast

TYPE COMPOSITION

Done by the Monotype. Note the close fitting of foundry type and the thin spacing of the skilful compositor. This is the perfection of Quality: The equivalent of new foundry type for each job.

12 Lines

about it at all. All the of THE LINOTYPE BULLETIN. In the January issue 1 ems, and was composed month the measure is 38 19-em slugs. By the ex- any competent operator n fact, specimens of wide onstantly being sent us, slugs in width, all equally BULLETIN. It is merely a part of the operator.

opqrstuvwxyz
opqrstuvwxyz

Exhibit C (11 lines) composed on same Monotype with same matrices as Exhibit B (12 lines). Thus the wide spacing attachment, used to imitate slug composition, adds about 10 per cent to the product for the same operator effort—the same number of keystrokes.

Exhibit C—11 Lines

Answer.—There is no trick about it at all. All the wide measure matter in each issue of THE LINOTYPE BULLETIN is set by means of twin slugs. In the January issue referred to the measure was 41 ems, and was composed of two 20½-em slugs. This month the measure is 38 ems, and is composed of two 19-em slugs. By the exercise of only reasonable care any competent operator can secure the same results. In fact, specimens of wide measure Linotype work are constantly being sent us, many of them three or four slugs in width, all equally good examples as THE LINOTYPE BULLETIN. It is merely a matter of being careful on the part of the operator.

*** ** SEE THE SPACE SAVED *** **

Monotype with the same matrices will give you fat or lean at slug faces, or for high-grade work closely fitted and thin ns minimum make-ready time and maximum wear on press.

A NEW IDEA in machinery has been embodied in the latest construction of the MONOTYPE, for, like "elastic" book cases, modern filing cabinets and composing room furniture, the Monotype is built up of units which may be combined to suit the needs of each individual printing office. Thus the MONOTYPE user can build up his equipment to suit his business exactly, since he can buy just the units required to fit his individual needs—the printer who chooses Monotypes uses "made-to-order" machines.

EXHIBIT F—Twelve lines cast from the same matrices used for Exhibits D and E (at the left). For the same number of keystrokes the proprietor causes the operator to produce twelve lines instead of eleven (Exhibit D) by "opening up" the face, casting it on a larger set (10 3-4 instead of 10) to put more white between the letters.

A NEW IDEA in machinery has been embodied in the latest construction of the MONOTYPE, for, like "elastic" book cases, modern filing cabinets and composing room furniture, the Monotype is built up of units which may be combined to suit the needs of each individual printing office. Thus, the MONOTYPE user can build up his equipment to suit his business exactly, since he can buy just the units required to fit his individual needs—the printer who chooses Monotypes uses "made-to-order" machines.

EXHIBIT G—Thirteen lines cast from the same matrices used for Exhibits D, E, and F (at the left). The same operator effort gives two more lines (18 per cent more matter) because the proprietor orders both methods of fattening used (E and F) to get the paper-covering quality of slug composition plus all the advantages of individual type except close fitting and thin spacing.

Don't cut prices—sell a substitute. If you keep your composing machines busy your presses will take care of themselves.

If your business requires two standards of composition quality—*type* and *slugs*—why own two kinds of Composing Machines?

Use It Helps You Sell

The Monotype in the Newspaper Ad Room

By ARTHUR HEATH, Foreman Cincinnati Enquirer

IN the July issue of "Monotype" is shown a list of one hundred daily newspapers now using Monotype machines for casting their own type. Six years ago this list would have included perhaps seven or eight papers. I can recall only three—The New York Sun, Chicago Tribune and Cincinnati Enquirer.

At that time two old-style Monotypes were placed in the Enquirer composing room on trial

for setting ads and casting display type for the ad room and head corner.

Our present equipment includes four of the latest style keyboards, three casting machines and matrices for all of our type faces from 6 to 36 point, including all head letter. Our total bills for foundry type have amounted to less than \$100 for the six years.

We are now providing a



ARTHUR HEATH

sorts storage system that will keep on tap ready for use 10,000 pounds of type, quads and spaces. This, of course means the complete elimination of distribution.

Non-Distribution Means Efficiency

At first glance throwing perfectly good display type into the metal pot is about as extravagant as using dollar bills for cigar lighters. It is so revolutionary that even in these progressive days most printers feel that the publisher who adopts the non-distribution plan is a promising candidate for the padded cell.

But it works; and it saves time—and money—the two vital savings in any daily newspaper plant. With one man operating two casters we place an average of 200 pounds of new type in the cases for every eight-hour day. Allowing \$5.00 for wages

and another \$5.00 for overhead expense, this new type in the cases (the machine operator lays his own type) costs 5 cents per pound. The cases are clean, no characters in the wrong box, no mixing of faces, and all the boxes filled. When one case is set out, the hand man simply shoves it in the rack, puts up a new case and goes ahead. He never worries about sorts, and, more important, he loses no time hunting for sorts. His spacing material is convenient—large boxes of each size space and quad for all point sizes.

Material is cheaper than time. Plenty of material (the compositor's tools) means more efficient workmen, more product with less effort, more productive hours from each man. Considered as type casters only, our Monotypes have long since earned their original cost.

Setting Ad Copy

Like all papers with a big Sunday edition, 85 per cent of our week's business is handled in three days. Every line of 8, 10, and 12 point ad composition in the Enquirer is either Monotype-set or hand-set from Monotype type.

And right here I want to emphasize that a great deal of the ad work and display heads now being machine-set by newspapers could be produced cheaper by hand using machine type. There is no economy in paying a machine and a man to do the work that can be handled quicker by a man without the machine. I have seen a man go to the machine with two or three lines for a small ad, or a head, and wait while the operator shifted a magazine, changed his measure and set the lines. He could have set the copy from the case while waiting for the machine. Until some inventor makes a machine with multiple keyboards you can't set heads, ads and news matter all at the same time on the same machine; neither can you change molds, measures and magazines for short takes and expect much profit.

Our practice is to keyboard everything ten lines

WINDSOR FIRST DAY OF THE SUMMER MEETING OF THE WINDSOR JOCKEY CLUB, AT WINDSOR, ONT.—MONDAY, JULY 21, 1913. Weather clear. Track fast.

1425 FIRST RACE—Six furlongs; for three-year-olds and upward; selling; purse, \$600; net value to the winner, \$450. Fractional Time—0:24 2-5, 0:48 4-5, 1:15. Went to the post at 2:30 p. m. Off at 2:33.

Ind.	Starters—Weights.	PP.	St.	¼	½	S.	F.	Owners.	Jockeys.	Op.	Cl.	Pl.	Sh.
1386	Russell McGill, 108	4	4	1½	1 ^s	1 ⁴	1½	R. J. Allison	Small	6-1	12-1	5-1	2-1
1362	Husky Lad, 109	2	1	5½	3 ¹	2½	2½	W. F. Cisco	Steele	15-1	25-1	10-1	5-1
1339	J. H. Houghton, 109	5	6	4 ^{nk}	4½	4 ¹	3 ⁿ	G. W. Scott	Waldron	4-1	6-1	8-5	4-5
545	Fern L, 105	1	3	2 ^b	2½	3 ²	4 ²	W. C. Clancy	Gross	5-1	9-2	8-5	7-10
1360	Ralph Lloyd, 99½	6	10	8 ^b	5½	5 ²	5 ²	W. R. Mizel	Kederis	20-1	30-1	10-1	5-1
1401	Chemulpo, 105	10	5	6 ^b	7 ^{nk}	6½	6 ¹	J. W. Hedrick	Snyder	8-1	12-1	5-1	2-1
1106	Clubs, 112	7	8	10	9½	8 ²	7½	M. C. Moore	Buxton	15-1	25-1	10-1	5-1
892	Labold, 110	8	9	7 ^b	6 ^b	7 ¹	8 ²	H. Benzinger	Martin	7-5	9-10	9-20	1-5
1386	Tillie's Nightmare, 106	9	7	9 ¹	10	9½	9 ⁴	L. P. Doerhoefer	Montour	8-1	15-1	6-1	5-2
1357	Union Jack, 102	3	2	3 ^{nk}	8 ^b	11	10	J. B. Bonfield	Ward	50-1	100-1	40-1	20-1

Start good. Won cleverly, place easily. Winner, b. g., 4, by Cunard—Winsome Ways. Trainer, J. W. Parker. Russell McGill left the barrier with a rush and drew away into a commanding lead, but was tiring at the finish. Husky Lad finished gamely and was wearing the winner down. J. H. Houghton outlasted the tiring Fern L in the stretch run. Labold met with early interference and was pulled up; was never able to improve his position. Scratched: 645 Moisant.

1426 SECOND RACE—One mile; for maidens three years old and upward; purse \$500; net value to winner \$375. Fractional Time—0:24 3-5, 0:49, 1:16, 1:43, 3-5. Went to the post at 2:45 p. m. Off at 2:56.

Ind.	Starters—Weights	PP.	St.	¼	½	¾	S.	F.	Owners.	Jockeys.	Op.	Cl.	Pl.	Sh.
1401	Queed, 104	12	4	3 ¹	2 ¹	1 ^b	2 ¹	1 ^{nk}	A. Turney	Turner	5-1	8-1	3-1	8-5
1404	Earl of Savoy, 112½	1	5	10½	7 ^b	6 ^b	5½	2 ¹	H. P. Headley	Loftus	8-5	9-5	4-5	2-5
1012	Luther, 102	3	1	2 ¹	4 ⁴	4 ¹	3 ¹	3 ^b	E. M. Miller	Martin	8-1	6-1	5-2	7-5
1189	Queen Sain, 109	6	6	1 ^b	1 ^b	2 ¹	1½	4 ¹	R. Davies	Moody	10-1	8-1	3-1	8-5

Section of Racing Form, Cincinnati Enquirer

or more, except narrow measure around cuts. With four keyboards and three casters we handle up to 200 columns of display ads in three days. Many offices using more machines and more hand men produce less business.

The great saving of the Monotype is in corrections, the facility for setting wide measure and the almost limitless combinations of type faces. The machines work all the time on new copy. We can set type across four columns delivered from the machine the full measure, and the

operator controls six complete alphabets for use in the same line without even touching a lever.

I am sending several all Monotyped full page ads taken from the Enquirer, all of which show the use of the "mushroom" or price figures. We use 14, 18, 24 and 30 point price figures on the machine. These two and three-line figures are set by the keyboard operator just the same as plain matter. There is no hand work. The saving over hand setting often amounts to as much as three hours on one page. We have matrices for different faces to match the display type. These can be changed in the matrix case in a few minutes.

Our keyboard operators are home taught, men from the news machines, the ad room and the proof room. When copy runs out they are shifted

there would certainly be a big saving of time over the present system of a hand man and a machine man on the same job, one frequently waiting for the other.

Setting the Racing Forms

A feature of the Enquirer for many years has been the "racing forms," giving complete details of results at all recognized tracks. The attached proof shows one of these forms just as it came from the machine. At times four tracks are operating, with a total of from twenty-four to twenty-eight races. Measured double-price, the average for each track is about 8,500 ems. The time for keyboarding and casting is one hour. Under our old system four machines were used. Two Monotypes de-

Clearing Sale of Women's, Misses' and Children's Summer Shoes

All styles, leathers and fabrics, many of which are in great demand now, marked at reduced prices for this sale.

Women's \$2.50, \$3 and \$3.50 Low Shoes
\$1.98

Broken and discontinued lines of two-strap pumps, button oxfords and ties, with high and low heels. Tan, patent and dull leathers. Not all sizes in each style, but every size in the lot.

25c Shoe and Slipper Trees—Sale price pair **17c**

Misses' and Children's White Canvas Button Shoes
\$1.50 and \$1.75 Value. Size 8 1/2 to 12
98c

Guaranteed Barefoot Sandals
"A new pair if the sole rips."
Size 9 to 2 **89c**
Size 5 to 8 **75c**

Regular Lines Reduced
These prices prevail throughout our entire shoe section on all regular lines.
\$5 Lines reduced to **\$3.95**
\$4 and \$3.50 Lines reduced to **\$2.95**
\$3.00 Lines reduced to **\$2.45**
\$2.50 Lines reduced to **\$1.98**
\$2.00 Lines reduced to **\$1.69**
\$1.75 Lines reduced to **\$1.48**

Misses' and Children's Roman Sandals and Strap Pumps
Values up to \$2, **98c**
Sale price ... **98c**

Wonderful values in patent, dull and suede leathers. Sizes 8 1/2 to 2. None sent on approval.

"Snow White" Dressing—Easy to apply, and will clean thoroughly. Sale price **9c**

Misses' and Children's White Nubuck Button Low Cuts and Two Straps. Size 8 1/2 to 2. **\$1.48**
Value \$2 and \$2.50.

Extra Special—Women's Low Shoes \$1

A limited number of pairs, in pumps, oxfords and ties—tan, black and white—all leathers and fabrics. Sizes 2 1/2, 3, 3 1/2, 4, 6 1/2, 7, 7 1/2 and 8. None of these will be sent on approval.

Women's \$2.50 White Canvas Button Boots, **\$1.48**
A charming round toe model, with high or low heels. Sizes 2 1/2 to 7. Widths B, C and D.

July Clearing Sale of Undermuslins and Negligees

50c Petticoats—Of ging-ham and percale. Each **39c**
75c Petticoats—Of striped ging-ham, with tailored flounces. Sale price **50c**
Gowns and Princess Slips—Slightly soiled. Values up to \$1.25. **60c**
\$2.50 Kimonos—Of serpentine crepe. Pull or Empire styles. Sale price **\$1.50**
Combinations—Trimmed in lace and embroidery. Reduced for this sale to **59c**
\$3.50 and \$2.98 Lawn Kimonos—Broken sizes in long lawn kimonos, reduced for this sale to **\$2.00**
\$1.50 to \$2.50 Lawn



Great July Clearing of All Summer Dresses, Coats, Suits and Skirts



\$16.50, \$18.50 and \$20 Linen and Eponge Dresses, reduced to **\$12.50**
\$15 Linen, Eponge, Crepe and Plain Voile Dresses, reduced to **\$10.00**
\$16.50 and \$18.50 Net, Ratine and Voile Dresses, reduced to **\$15.00**
\$20 Bordered Voile, Crepe Voile, Ratine and Embroidered Batiste Dresses, reduced to **\$16.50**
\$65 Japanese Embroidered Robes, reduced to **\$50.00**

\$27.50 and \$28.50 Fancy Net, Eponge, Canton Crepe and Voile Dresses, reduced to **\$23.50**
\$31.50 Voile and Canton Crepe Dresses, reduced to **\$27.50**
\$40 Canton Crepe and Voile Dresses, reduced to **\$29.50**
\$50 Lace and Charmeuse Dresses. Also Matelasse Afternoon Dresses, reduced to **\$38.50**
\$25 Net and Crepe Voile Dresses—All white, or with colored embroidery. Also eyelet embroidered linens. Reduced to **\$21.00**

Serge Dresses Greatly Reduced as Follows:
\$22.50 DRESSES—**\$16.50**
\$20 DRESSES **\$15.00**

Silk Dresses at the Following Reductions
\$30 and \$35 Dresses **\$21.50**
\$25 Dresses **\$16.50**
\$20 and \$22.50 Dresses **\$15.00**
\$18 Dresses **\$12.50**
\$15 Dresses **\$10.00**

Cool Summer Dresses
Of Voile, Linen, etc., at the following greatly reduced prices:
\$12.50 and \$15 DRESSES \$5.00
\$10 DRESSES \$4.00
\$5 DRESSES \$2.50

Cloth Skirts
\$5 Skirts, \$4.00.
\$4 Skirts, \$3.00
\$6.50 Luster Skirts, \$5.00
All alterations at actual cost.

SPORT COATS
Of Worumbo, Chinchilla, Velour de Laine, Eponge and Blanket Cloth, in white and all the pastel shades. Very stylish and stunning, and marked at the following greatly reduced prices:
\$10, \$12.50, \$15, \$16.50
\$8.50 and \$10 Tennis Coats—Of green and scarlet flannel. All priced for this sale at **\$5.00**
\$25 and \$30 Coats—Checks, Eponge and light colored cloths, reduced to **\$18.00**
\$15 and \$16.50 Cloth Coats—Light weight, including serges and some white. Reduced to **\$10.00**
\$40 and \$45 Silk Coats. Reduced to **\$30.00**
\$35, \$30 and \$25 Silk Coats—Novelties, in Mandarin styles and draped models. Reduced to **\$18.00**
\$18 and \$20 Silk Coats—In Mandarin and blouse styles. Reduced to **\$15.00**

The following Stupendous Reductions on all **Cloth Suits**
\$45, \$50 and \$60 Suits, all go at \$20
\$30 and \$35 Suits, all go at \$15
\$20 and \$25 Suits, all go at \$10
\$15 Linen Suits, marked in this sale at \$6.50

Section of all-Monotyped full page ad from Cincinnati Enquirer; price figures composed at keyboard

to other work and the casters go on sorts. We find it better to have more keyboards than casters, because with the keyboards finishing ahead of the casters it leaves men available for make-up and corrections or other work during the closing rush. I believe the time will come when newspapers using Monotypes will secure the greatest efficiency by having enough keyboards so that each ad man will do his own machine work. This would require too much investment with any other machine, but when we remember that the interest on a Monotype keyboard for a year is only \$38.00, less than one dollar per week, the idea seems practical. The board is easy to learn—any good printer should become a good operator with a few weeks of practice—and

liver four tracks in two hours, and during the six years the racing forms have been Monotyped we have never been delayed on the make-up because of machine troubles.

Well-Pleased Advertisers

We have received many compliments from advertisers on the set-up and appearance of our ads due to the use of the Monotypes. It certainly is an incentive to a man to do good work in setting an ad when he has all the sorts he needs, for not only a better appearing ad is turned out, but much office time is saved. We never have occasion now to tell an advertiser there is not enough type of one face in the office to set an ad.

Monotype Sales Notes

Two New All-Monotyped Dailies

"*El Heraldo*" is the new daily paper to be issued in Havana, Cuba. It is financed by a number of influential Cuban business men and will start under most favorable auspices. Sr. M. Marquez Sterling, who will be the manager of "*El Heraldo*," spent most of July in the United States investigating machinery. He came without prejudice and the result of his visits to newspaper plants using both Monotypes and slug machines was an order for five complete Monotype equipments. No slug machines will be used.

The Haverhill "*Herald*" is another new daily that will be published in Haverhill, Mass. It will start with five Monotypes and no slug machines. The man interested in this new plant did not decide on precedent, but considered the comparative merits of all composing machines and decided in favor of the Monotype because they were convinced it would give them a quality printed paper at a cost no greater than ordinary slug matter.

The Reading News, the new daily that has already become an assured success under the management of Mr. Gilbert S. Jones, will in future give its advertisers the advantage of all-Monotyped quality, having arranged to install a standard equipment for setting ads and casting display type for the cases.

Another newspaper that will in future make its own type on its own Monotype is the Columbia (S. C.) *Record*, which is now erecting a building to cost \$100,000 and making many other improvements.

In the Book and Job Office

John P. Murphy, Philadelphia, specializing on railroad tariff work, will use the Monotype hereafter for all his tariffs. Two standard equipments are now in operation taking care of a heavy volume of business.

At Camaguey, Cuba, Walfredo Roderiguez will take advantage of the versatility of the Monotype for setting both English and Spanish without any change whatever at the machine. He is installing a complete equipment for both type-setting and type-making.

Some other new Monotype users in the July list of sales are Page Printing & Binding Co., Sher-

brooke, Canada, one standard equipment; Garber Publishing Co., Ashland, O., one standard equipment; Wray & Ash, Springfield, Mo., one standard equipment; Fidelity Printing Co., Kansas City, Mo., one standard equipment.

"Ask the Man who has Owned Both"

The Thos. P. Henry Linotyping Co., Detroit, Mich., long known as among the leading trade composition houses, has in the past sold both type and slugs, operating four Monotypes and four slug machines.

With the wide spacing attachment (see "Profit, or Loss, in Type Faces," in July Monotype) Mr. Henry found he could produce two kinds of composition with his Monotypes; that is, he could add to the quality of individual type the space-covering feature of slug work. He is, therefore, discarding all of his slug machines and installing two more standard Monotypes, making six in all.

The customers of the Henry plant have shown their appreciation of Monotype quality as a help to selling printing, as well as for ease of correction in their own plants and saving in make-ready on their presses.

Some Book and Job Repeat Orders

Repeat orders for July include the University of Chicago Press, Chicago (previously bought eight Monotypes); Stephen Greene Co., Philadelphia (this order three machines, previously bought eight Monotypes); Keystone Publishing Co., Philadelphia (previously bought two Monotypes); The Roycrofters, East Aurora, N. Y. (previously bought one Monotype); Stewart Scott Printing Co., St. Louis (previously bought two Monotypes); R. J. Taylor, Ottawa, Ont. (previously bought two Monotypes); Merrill Printing Co., Hinsdale, Ill. (previously bought one Monotype.)

Bright Paragraphs From "Critique"

THE Editor of "Critique," monthly House Organ of the Perry & Searle Company, Lynn, Mass., uses his pen and the scissors with equally good discrimination. Here are some of his paragraphs:

The fellow who obeys orders generally knows how to land them, too.
It's the ginger in a man that makes his work hot stuff.
A job done well costs least in the long run.
When looking for faults, use a mirror, not a telescope.
It always takes two to pull off a successful smile.
Just doing your duty soon proves what you're really worth.
Staying at the top often requires as much effort as getting there.
If you must play a policy, try honesty.
Only live fish swim up stream—which way are you going?
The man who never made a fool of himself must be a lonesome cuss.
Far better to rise with the lark than go out on one.
Hot air and cold feet are very often boon companions.
The people who never arrive generally never start.

Operating the Monotype Keyboard

WE have just issued this cloth bound book of 50 pages and will be pleased to send a copy to any Monotype operator on receipt of 10 cents to pay mailing charges.

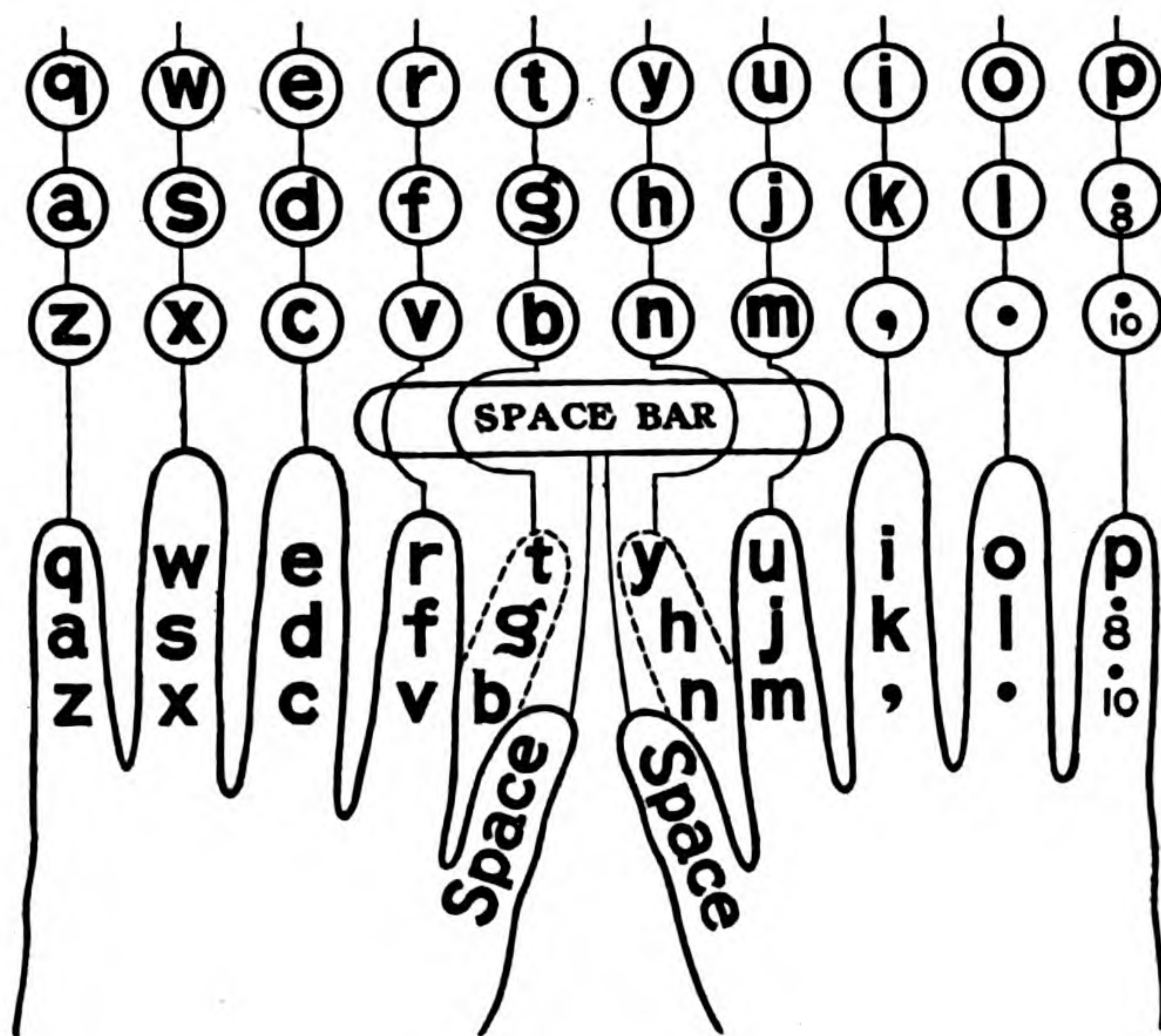
The object of this book is to make it as easy as possible for operators to learn to "always hit the same key with the same finger." The importance of this cannot be overestimated. The operator who fingers the keys properly saves entirely the brain-strain of selection; "to make up your mind" requires effort even in the simplest matter. Offer a man two apples exactly alike, and before taking one his brain must decide *which* one to take. The operator who has no definite and logical method of fingering forces his brain, thousands of times each day, to perform the operation of deciding which finger to use. The operator who learns the correct method of fingering "makes up his mind" once for all, and sticks to it, so that fingering very quickly becomes a matter of habit.

The operator who spends a little time on practice, and learns to always hit the same key with the same finger, not only relieves himself of the brain-strain

never hope to approach. Correct fingering means constancy of operation; under the hands of the operator who fingers correctly, the keyboard clicks as uniformly as a clock ticks.

To always hit the same key with the same finger is simply a question of memory training and muscle training. *Memory training*, to associate the letters of the alphabet with the fingers that strikes them, so that each letter means a definite motion of a definite finger. *Muscle training*, so that the fingers will move swiftly and accurately to the required keys and stop there when they get there.

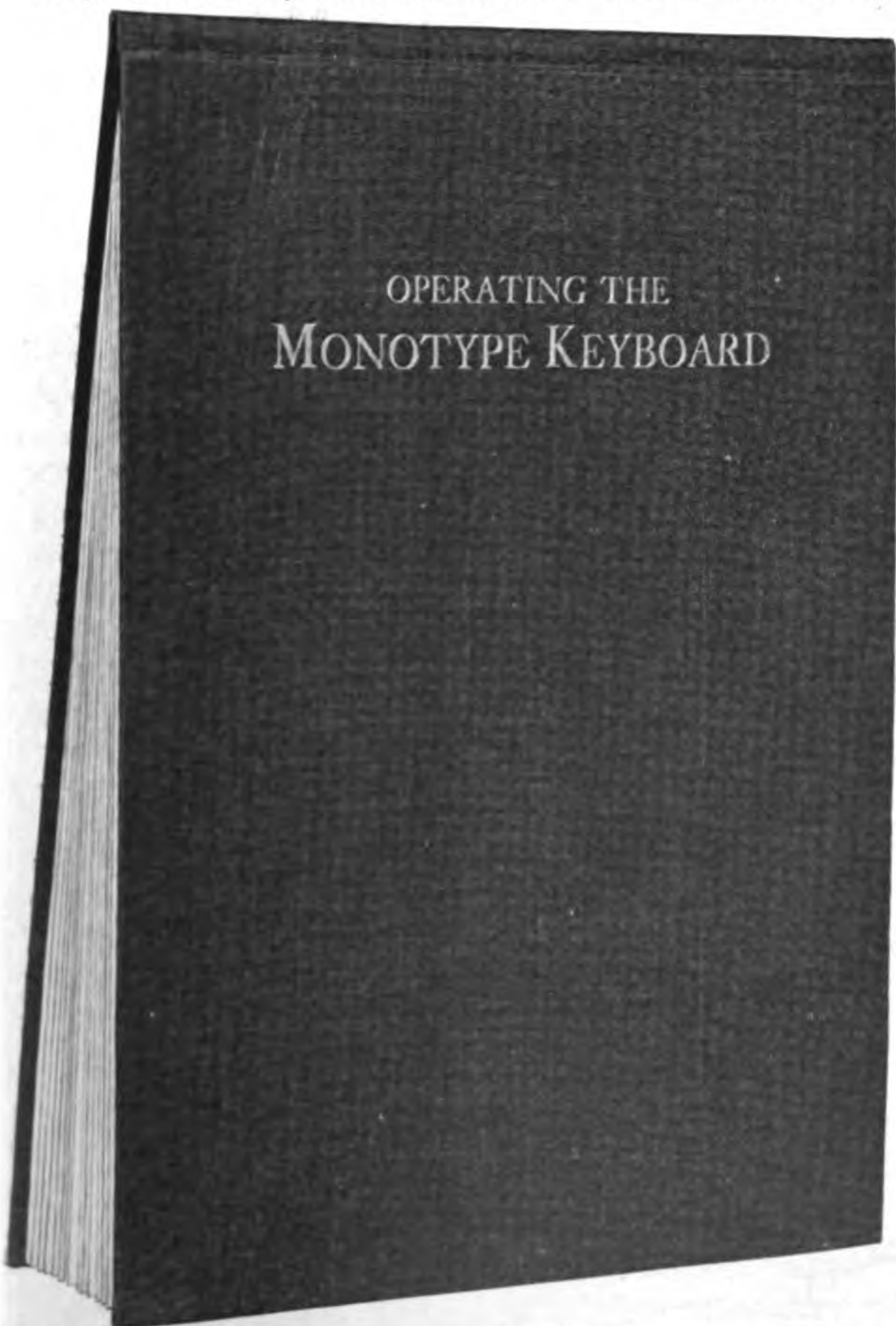
As an aid to memory training we furnish the following pocket chart showing the characters of



the universal typewriter keyboard arrangement and the fingers that operate the keys for these characters. We also furnish a little diagram in tablet form that may be slipped in the pocket so that the operator at odd moments may test his memory by filling in these diagrams with the correct letters for the different keys. There is no better practice than writing down the letters in different order; for example, first from a to z, then from z to a and then by fingers that operate the different keys.

This new book not only gives complete instruction for acquiring the correct method of fingering, but also the necessary practice exercises. There is no better way for a compositor to acquire the correct method of fingering than to practice these exercises at home on a Smith Premier typewriter, which has a straight-line key arrangement and no shift key, like our keyboard. Thus, at home, the operator can go slowly, make every motion correctly, see that he makes no errors and very quickly develop an easy, correct, natural finger motion. The book is bound so that the covers when turned back form a copy holder for use with a typewriter.

Price, except to operators as above noted, 75 cents postage paid.



of making sixty thousand decisions a day, but also he is able to work without effort at a uniformly high speed that the "hit or miss" operator can



Monotype Keyboard School, 215 N. Tenth Street, St. Louis, Mo.

The St. Louis Keyboard School

The St. Louis School for teaching keyboard operators was opened January 1st of this year and has already proven its value to composers with the ambition to become Monotype operators and to Monotype users in need of operators.

This school is the result of co-operation between the St. Louis Typographical Union and the Monotype Company. It is open to all members of the St. Louis Union and to members of other Unions who bring their membership to No. 8 when admitted to the learners' classes. There are three four-hour sessions daily—8 a. m. to 12 noon, 1 to 5 p. m. and 6 to 10 p. m. An instructor is present during the time of all classes. The average time for graduation is sixty four-hour sessions, or thirty eight-hour days. Some learners finish sooner, while others may be held longer until they show satisfactory speed and clean proofs.

The equipment has been increased from four to eight keyboards, all of which are kept busy, and a casting machine has been installed for running the ribbons of the students to show just what progress they are making. Upon entering the school the student is started first on the correct method of fingering. He is shown the necessity of always striking the same key with the same finger if he is to reach his maximum speed with the least effort. After the finger practice lessons straight matter is taken up and along with this the operating ad-

justments of the keyboard. Later there are lessons in casting up and setting intricate tabular copy.

Tuition is free and there is no other expense attached to the course, but as an evidence of good faith entrants are required to deposit \$10, which is returned at graduation. The school directors reserve the right to dismiss any student who does not show advancement or the proper interest in the classes. After graduation students usually go to positions as machine apprentices for from one to three months, which gives them opportunity to become familiar with the style and working conditions of the office before they draw the journeyman scale. This plan has proven quite satisfactory to both operators and proprietors.

Positions are not guaranteed, but up to the present all graduates have been placed. Applications for operators should be made as far as possible in advance, so they may be trained with a view to the particular work they are to do.



What the Operators Say

St. Paul, Minn., July 16, 1913.

Lanston Monotype Machine Co.

Philadelphia, Pa.

GENTLEMEN:—

Nine keyboard operators and five caster men employed by the Minnesota Typographic Co. of this city wish to commend "Monotype, A Journal

of Composing Room Efficiency." There is surely a concise statement of facts in each issue, and they have all been substantiated by the work of the Monotype keyboards and casting machines in use by this company. The Monotypes have been a great factor in making this composing room the largest of its kind west of Chicago.

Respectfully,

H. S. DRAPER
Chief Operator
JACK KIRBY
C. L. PARTRIDGE
W. H. CAMPBELL
W. B. TRIMBLE
Caster Operators

E. E. TRUAX,
Chief Operator
JOHN H. HOHENTHANER
EDW. W. DRAPER
R. W. ABBOTT
MRS. B. MACLEAN
A. G. WOODBURY
JOS. SIMICEK
GEO. F. PRUDHOMME
PAUL PAMPUSCH
Keyboard Operators

This is the kind of letter we appreciate. The co-operation of operators has meant much in the development of Monotype efficiency, and each month a copy of "Monotype" goes to every keyboard and casting machine operator whose address we can secure. The Minnesota Typographic Co. is fortunate in having men with the spirit of progress who keep informed of the advances in their chosen business.—*Editor.*



Matrix Case Cover Plate Screws

ONE of the greatest advantages of the Monotype is its absolutely flexible matrix system—each matrix a separate unit, these units combined in the matrix case as required. Most Monotype users take the fullest advantage of this ability to make the machine fit the job and, consequently, require frequent changes in matrix case arrangements.

In changing the matrix case for a hurry job, it is exasperating to drop a cover plate screw and have to hunt for it. Efficiency experts tell us that nails are now so cheap a carpenter ought not to stoop to pick up a dropped nail. Certainly it does not pay to keep a Monotype standing idle while the

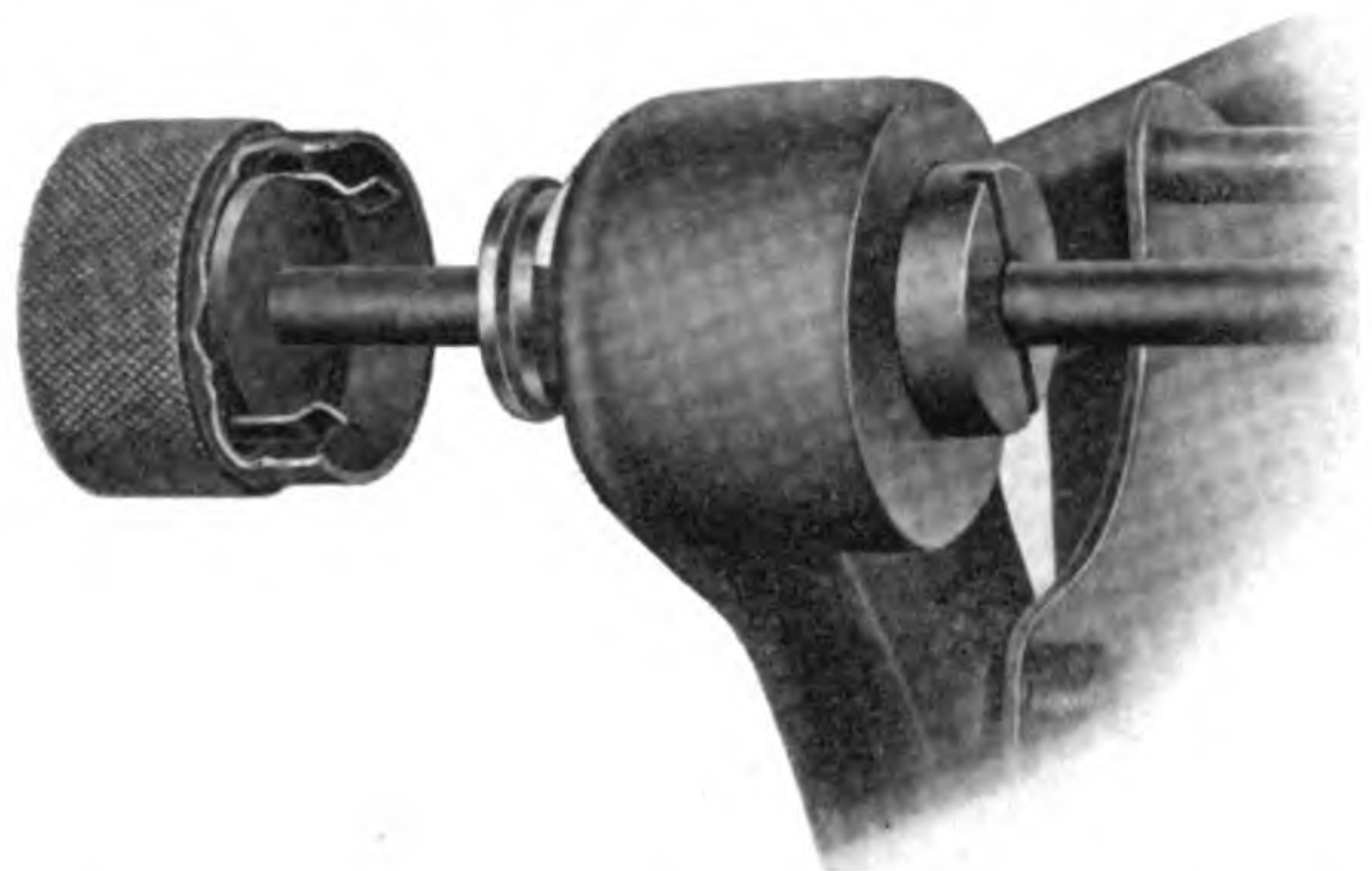
operator hunts for one of these screws. A Monotype earns at least \$2.00 an hour, 3.3 cents a minute—why hunt for a screw costing ½ a cent? To save the time of our customers, and our friends the operators, from this annoyance we now furnish these screws in packages of 100 for 50 cents a hundred.



Paper Spool Guide

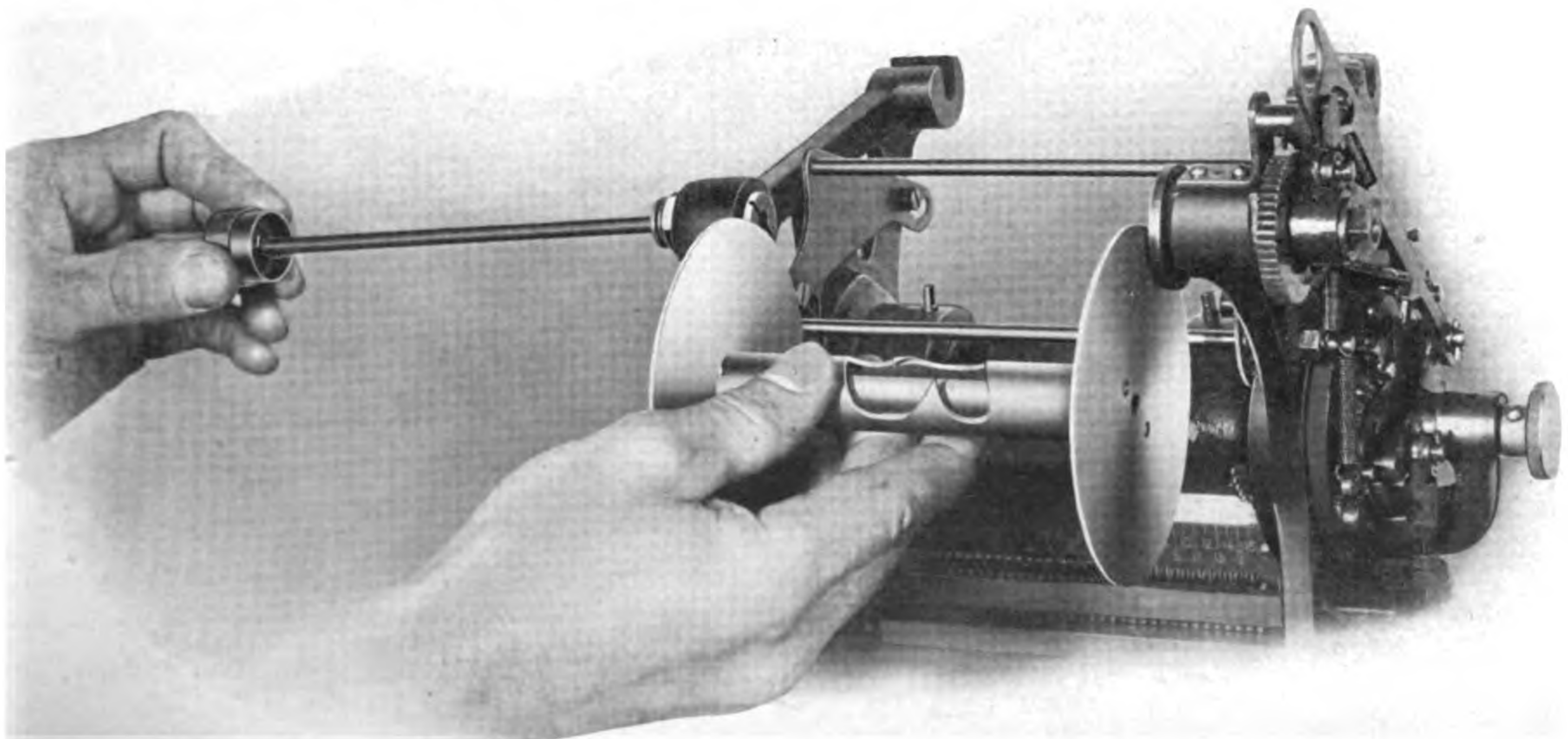
OUR motion study experts have found a means to save operators a few minutes a day and some effort in putting on keyboard spools. The new Paper Spool Guide, which can be applied to any Style D, or DD Keyboard (see illustration) is adjustable for either large or small flange spools. It is nothing more or less than a basket into which the operator shoves the spool with one hand while he pushes through the paper spool shaft with the other. No effort whatever is required to position the spool so that the pin will pass through it; push the spool back against the guide, that's all.

The new paper spool shaft has spring clips to



prevent it from jarring out of the spool when the board is operating at high speed.

The price of the Paper Spool Guide complete with screws for attaching same is \$1.00; price of Paper Spool Shaft, including necessary new paper spool shaft bearing nut, is 85 cents.



Monotypography

"Profitable Printing" is the title of the new House Organ of the Knowles & Holtman Company, Cincinnati. It is sixteen pages and cover, well arranged and shows illustrated pages from some of their Monotyped catalogs. Under the heading "A Word about Ourselves" they say: "We are not strangers to this part of the country. We have been in business for six years and have worked and grown and kept quiet about it. Now we feel that we are old enough and strong enough to get out after big business and grow some more. We have arranged our plant solely with the idea of doing the highest class of printing. Up-to-date Monotypes give us new type for each booklet or catalog in a variety of faces impossible in offices using other styles of typesetting machines. The men who run these machines have been carefully selected and each is an expert. Good work cannot be produced without good men, and if such a thing were possible we would have our men a little better than necessary."



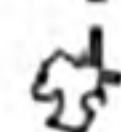
"Critique," from the press of the Perry & Searle Co., Lynn, Mass., is a distinctly unique and artistic monthly showing of good printing, and it reads better every month. Every line is original, live-wire selling talk that ought to bring in new business. "Critique" defines advertising as follows: "Advertising is the personality of a man or a concern, expressed in type, to secure business. It is the means of getting in touch with a clientele—the prospects of a business. Take away the element of advertising and the business world would lie stagnant and at a standstill."



From "The Complete Press" of The Matthews-Northrup Works, Buffalo, comes the first issue of the "Electric Interlocking Handbook," 450 pages of text, tables and drawings, bound in full leather and finished in gold. Of course the composition was all set by their battery of Monotypes and the book kept up to their high standard of typography.



"House Notes" is a neat little booklet "edited and published in the interests of the A. W. McCloy Co. (Pittsburg) employees." The July number is well arranged and is full of ginger talk that will help the employees to help the McCloy Company.



The Print Shop Press, Madison, Wis., is using the Monotype to help them sell. They forward a four-page circular "Illustrating to Authors some Distinctive Features of the Print Shop Press." The advantages of Monotype composition are explained and illustrated by photographs of the operators at work at the machines. One page shows "Some Stunts" in intricate composition that have been set on their Monotypes.

CENTRAL STATES MILLION DOLLAR EXPOSITION TOLEDO—SEPTEMBER 1 to 6

THE MONOTYPE—like elastic book cases—is built on the Unit System. Unit A is the Type Caster (makes type for the cases in all sizes 5 to 36 point.) Unit B is the Monotype composing machine (sets type in all sizes 5 to 12 point—14 and 18 point units can be added.) It is simply Unit A with the necessary units added to deliver the type on the galley in automatically spaced lines. Unit F is the Double Keyboard, for composing at the same time two different point sizes and two independent measures from the same copy with the same operator effort required for one size and one measure.

THERE ARE hundreds of printers who have read our booklet "Profit, or Loss, in Type Faces" and are anxiously awaiting opportunity to see *one* machine, with *one* set of matrices, producing *two* kinds of composition. At Toledo we will show the Monotype operating with the wide spacing attachment—adding from 10 to 15 per cent to the product with the same operator effort and no added cost.

ALL OF THESE UNITS will be on exhibit at Toledo. Come and see them demonstrated.

The Elastic Monotype—Built on the Unit System—"It helps you grow and grows with you."