

LESSON SEVEN

How To Set and Handle Body Type

Instructions for preparing your composing stick for setting type will be found in lesson two. We'll assume you are going to start with straight matter, that is, solid work without display. Hold your stick as shown in the illustration, and proceed as follows.

Between each word place a 3 em space, or if you are going to set your work a little closer, which is often done nowadays, use a 4 em space. Read a few words of the copy ahead, so that you don't have to glance at it for each sin-



Using a Composing Stick

gle word. Check the line for mistakes before you respace it. Another spacing method is described in lesson three. When you are at the end of the line, if you find that you can divide a word between syllables and put the first part on that line, do so, except that a syllable consisting of only one letter should not be left by itself. (That is, words like alone, about, etc., cannot be divided.) If another word or syllable can be gotten on the line by reducing the space between the words in that line, replace as many of the spaces as necessary with the next size smaller (4 em for 3 em, or 5 em for 4 em) or if that is not pos-

sible and there is some space remaining, use thicker spaces. Leave no space at the end unless it is the finish of a paragraph, and do not divide the last word of a paragraph so that there is nothing on the last line but one syllable. Space out the preceding line so that the full word is on the last line.



Replacing Spaces

When respacing take full advantage of the appearance as well as the actual spaces used. Letters with parallel parts to them such as l and h need thicker spaces between them than T and A if they are to look equally spaced. Capital letters are particularly subject to such adjustments. Don't put heavy spacing at one end of the line — spread it over the entire line. While you will probably start your paragraph with an em quad, and you can use the same after a period, colon, exclamation point or question mark, you can, for close spacing use an en quad after a period, taking advantage of the white space above the dot. In the same way, where a comma appears in the text, if you are cutting down to thinner spaces you can take more out, but if you are adding space, less should be placed after it. Attention to little details like this will greatly improve the appearance of your work.

Here are a few ways by which your spacing can be greatly improved:

- a. Use a smaller space after a comma than otherwise between words.

- b. Do the same if a period is used for abbreviation purposes, but not if it is the end of a sentence.
- c. Use a large space after a semicolon.
- d. Use a thin space between a word and an exclamation point, interrogation point, colon or semicolon unless the last letter of that word itself has sufficient space around it.
- e. Use a thin space between quotation marks and the word quoted unless it is followed by a period or comma. Use one on each side of a dash, unless it follows a period or comma.
- f. Short words like of, a, the, and, etc., should have the same spacing on each side.
- g. Try not to have unevenly spaced lines — wide spacing on one, thin spacing on the next. Usually such lines can be evened up by carrying over or pushing back a word or syllable.
- h. Where possible, don't have the same word at the beginning or end of two successive lines.
- i. Avoid divided words on two or more successive lines. The hyphens in a row do not help the appearance of the composition.
- j. All-cap lines should be wider spaced than normal cap-and-lower-case lines. Extended styles of type require more space than ordinary. All cap lines are difficult to read unless properly spaced. Some typographers recommend two three-em spaces for caps, but the appearance and shape of the letters must be taken into consideration, and spacing made accordingly.
- k. Extra leads between the lines call for wider spacing between words to preserve the balance

- of the composition. Approximate leading should be determined in advance so that spacing can be handled accordingly.
- l. Wide spacing will make the use of a thin space on each side of the hyphen in a hyphenated word useful to preserve good appearance. Punctuation and dashes should likewise have more spacing, depending on appearance for the exact amount.
- m. Long lines give more opportunities for respacing to avoid use of hyphens, and full advantage should be taken of them. Just as in short lines it is poor taste to leave a one letter syllable by itself on a line, wide measure work should be respaced to avoid leaving either one or two letter syllables.
- n. Italic type requires a little wider spacing than upright or roman. The irregularity of the letters need varied spaces for good appearance. When respacing, watch letter shapes and add or subtract only where it will do the least harm.
- o. Avoid having the last line of a paragraph full length. Respace it so as to give as much contrast with the full length lines that precede it as possible. However, a three or four letter word on the last line of the paragraph, all by itself is not good. This can often be foreseen as you set the previous line, and thinner spaces used so as to make it unnecessary.

All of the above is based on a first class job of handsetting. A composing machine, like a linotype, mechanically makes the space equal between every word in the line, but in doing so entirely disregards the APPEARANCE of

equal spacing which can only come from observance of the suggestions we have made. You as a printer will have to decide for yourself how far you want to go toward perfect spacing. Some jobs may not be worth it, others more certainly are. The craftsman or organization which does the highest grade of work very often has the best customers, and lifts himself out of cheap competition.

Leads are used between the lines for spacing them out. The most common size is two point, although one point may be used instead, or the lines may even be made up without them — set solid is the printer's description in that case. While it is advisable to either use or not use them throughout on a particular section of type, leading can be varied within reason to make the text conform to available room. When using variable spacing between lines, the same rule applies as between words — appearance must be the guiding factor. For instance, if a paragraph ends in a short line, the apparent spacing is likely to seem smaller than it really is, and if leads are being removed to close up the type, they can be left between that line and the next paragraph, or a one point substituted for the two point.

On the other hand, if the copy being set is such that it will not detract from appearance, you can put more rather than less space between paragraphs, especially those having a long last line before the next paragraph. Leads can be used between headings, and space can be used up in other similar ways. For instance, the beginning of the article can be given wider spacing than the balance. You'll often see that done. Space can often be placed to advantage between display lines. Where greater spacing than 5 points is needed, six point lead

slugs (same as leads but six points thick or more) can be used.

If you piece out the line with long and short leads, don't forget to alternate long and short in each line, so that all the short leads will not be on one side, nor the lead ends come in one spot. Unless you do, the column may split at the joints when handled, and a bad case of pi result.

Don't Mix Spaces and Quads in a Line Any More Than Necessary

When spacing out the last line of a paragraph, title lines, or in any spacing which requires several kinds of spaces and quads together, make it a practice to put the largest quads or spaces on the outside end of the line. It will not only prevent the smaller pieces dropping out or falling over when you are handling the form, but it will also be easier to put the material back in the cases if you know without looking that the smaller spaces or quads are nearer the type, and the bigger ones near the edge. This is common printing practice, but is sometimes lost sight of in a rush of work.

Setting Display Type

Generally speaking display type is centered, although in present day layouts that is not always the case. Where it is, be sure to get the same amount of space on each side, and this can best be done by using the same size spaces and quads on each end. Put the spaces and small stuff next to the type, the quads at the outer ends. Periods are not normally used at the end of display lines. The most important part of such work is to give an appearance of being centered. Usually, because of this, quotation marks can be disregarded when centering — in other words, they may be treated as so

many spaces of the same size. However, when the job is proved up it may be necessary to make adjustments for appearance.

More complete discussions of layout, design, and typesetting will be included in later parts of this course.

To handle the type easily and safely, lay the composing stick on a flat surface, with the open end away from you. A little water sprinkled lightly over the type will help it to hold together.



This cut shows method of lifting and handling lines of type. Place a lead, rule or reglet (rule is best as it does not bend and is full height of the type) on each side of the lines to be lifted, place the first fingers at the head, the thumbs at the foot, the second and third fingers at the ends and, pressing firmly together, lift carefully. When clear tip all on edge, facing you, turn feet down again just as you place in the galley or form.

Narrow Widths in Your Composing Stick

Some printers, when setting very narrow widths in the composing stick, prefer to leave the stick set to a normal measure, and fill up the balance to the necessary column width with big quads—others

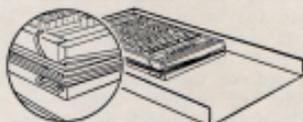


How metal furniture is used in setting narrow widths. Type is put in space marked by arrow.

use metal furniture, as illustrated. They claim it is not only easier to set, but also considerably handier to remove the lines after they are done.

Tying Up A Form

Curiously enough a form can be easily wrapped with string in such a way that it will hold together when it is lifted, and this is usually done when the job is ready for taking a proof, as well as after the complete printing job is done, if it is to be laid away for running again. A form properly tied up is shown in the illustration. Wind the string clockwise,



A form properly tied up

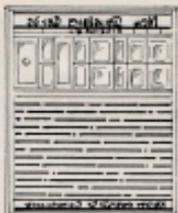
and see that the successive turns go over the end of the first one. Keep the string tight as you wind. Use six to ten turns. The form should have pieces of wood reglet at top and bottom before the string is placed on it. Tuck the end of the string in as shown, which will make it easy to unwind when you want to use the form or throw it in the case.

Making Up Forms to Print More than One Color

We are illustrating here a form both complete and as it is made up for each of two colors. Number one shows the entire job, the lines in the center being supposed to represent lines of small type. You will note furniture around the cut just above the small type. That shown is metal furniture, which is particularly handy in such a spot. We will assume that we want to print the border and the cut in a different color from the rest of the job. It will be best to get a proof of the whole thing in one color first, as a key impression. You can then unlock the form, and lift out the cut, substituting a piece of furniture or a block of wood of equal



Full form



First color



Second color

How to print two colors from one form.

size. Take out the border and put lead slugs or quads in place of it. Relock the form in the chase, and you are ready to print the first color.

When that is done, reverse the process, and you will have a form like number three. This will assure a perfect job on both colors. The advantages of this will be more apparent on a job with a number of lines of type of different color scattered through the form, where perfect register is necessary.

How to Print in Two Colors Without Using Two Forms

Very often the following method of color printing will save you the time of making up a second form for your lines or cuts in color.

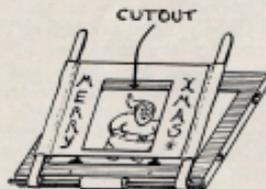
Lock up the form in the regular way, as if for one color, and set your gauge pins—get all ready to run. Take the chase out of the press, and lay heavy cardboard under the matter to be printed in color, at the same time taking an equal amount of cardboard out of the tympan padding in the same spots. Loosen up the form enough so that you can plane down the type and material which does not have cardboard under it, then tighten up again. This will leave the part to be printed in color just a trifle higher than the rest, and if you handle it carefully, possibly using roller supporters to keep the rollers level and off the rest of the

type, you will be able to print your color. For the black or the other color, reverse the process—that is, raise the lower parts, and lower the raised parts of your form.

Printing Part of a Form at a Time

Our illustration shows a way of printing either part of a cut or of a form at a time without disassembling it.

First, take the printing of a cut, as actually shown here. You want to print part in one color, the rest in another color. In this case the words are to be in one,

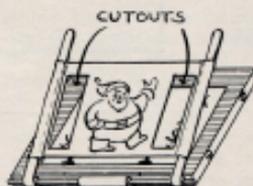


FRISKET CUT OUT
FOR FIRST COLOR.

and the illustration in another tint. Paper is fastened to the grippers as shown, so that when an impression is made, only the central part will be printed on your paper or card stock. The cut-out part in the middle does that. It will be best to build up the tympan under the part to be printed to compensate for the

thickness of the paper on the grippers (called the frisket, or shroud).

After the central part has been run, a new frisket is cut, with holes or cutouts as shown, the extra thickness on the tympan is



FRISKET CUT OUT
FOR SECOND COLOR.

removed, and a couple of new ones substituted at each end. The second color can then be run.

The same treatment can be used on a type form, or a form of mixed cuts and type. However, instead of building up spots on the tympan, you can if you wish, underlay the parts to be printed on the bottom of the form in the chase. If you do, you will find it best to loosen the form, and carefully plane it down so that the parts to be printed are higher than the rest by the thickness of the paper or card you have put on back. When the second color is to be done you will change the underlays and relock or tighten the form to bring up the parts required in that color.

Sometimes, in running a form, several letters or a word pulls out, and may not be discovered until part or all of the press run is made. The missing parts can be run in afterward by using this same scheme — that is, they can be raised ever so slightly after they are replaced in the form, a frisket can be made, and a rerun put through so as to strike in the characters in perfect register (alignment).

Thin Spaces

Lines of type which are not properly justified (spaced out) will make any type form extremely difficult to handle or to lock up in the chase, yet sometimes the ordinary spaces seem hardly small enough. A supply of 1 point brass and $\frac{1}{2}$ point copper spaces in the various sizes will provide just what you need in such cases. You can then make your lines so exactly spaced that when you lock up your form in the chase you will not find some lines too loose and others too tight.

Thin space cases are made to hold a supply of all sizes, both $\frac{1}{2}$ -point and 1-point in thickness. Whether or not you use the larger sizes often or not at all, the various sizes of brass or copper will help you in justifying forms, filling mortised cuts, etc.



Thin Space
Case

Most printers keep the case with its thin spaces at hand while setting jobs, so that no time will be lost looking up the box or the spaces. It is also usually the practice to keep spaces and quads of the regular size in separate cases made especially for the purpose, so that it is not necessary to keep, for instance, 8-point spaces and quads in the several cases in which you may have that type. In other words, it concentrates all the spaces and quads of one size in one place, so that you can use them to the best advantage without hunting around in more than one case for them.

When this is done, it is necessary to have only one case for the thin spaces, and a case for each of the sizes of regular spaces and quads (6-point, 8-point, etc.). Such a concentration of spacing material in one place will usually pay for it-

self in time saved, to say nothing of the advantage of knowing just what you have at all times without looking in half a dozen different cases.

Lesson Seven—Questions

1. Describe a frisket and explain how it is used.
2. What modifications can be made in spacing which will improve the appearance of the work if you have to respace?
3. How can the use of leads be varied to add or subtract space without its being apparent in the finished work?
4. Describe in detail how you would set display lines, with particular reference to the difference in treatment from body or solid matter.
5. How should a form be tied up?
6. What can you do to a type form which will make picking it up easier and safer?

The Printer's DICTIONARY

Break In—To insert cuts in text matter according to proof markings.

Break Line—A short line, such as the last line of a paragraph.

Brevier—Eight point type under the old system of names for each size.

Brilliant—Old term for 3½ point type.

Bristol Board—Cardboard of the same material all the way thru, as contrasted with board made by using a different filler. It is said that the term originally came from Bristol, England, and was applied at first to board made by pasting sheets together. Practically all business and social card work of any consequence is printed on bristol board.

Broadside—A large folder or circular.

Brochure—An artistically gotten up booklet or pamphlet.

Bronzing—The use of gold or silver bronze on printing. The printing is first done with gold size, (with an ink made especially sticky,) so that after the printing is finished, and before the size is dry, it is possible to dust the work with the bronze, making the work look like gold or silver, according to the kind of bronze used. Bronzing has been largely superseded by direct printing in gold and silver. Do not confuse this kind of bronze with that used in raised printing. The two kinds are not interchangeable.

Bruce, David, Jr.—Invented the first typesetting machine in 1838.

Buckle—A wrinkle, crease or twist in paper.

Burr—A small projection of metal on any part of a piece of type or plate. Burrs may be caused by either casting, or sawing the plate in such a way that the edge is not clean cut.

Business Announcements—Bristol board cards or vellum sheets, the latter usually folded, with envelopes, used for announcements of openings, new models, etc. usually in formal language, business announcements and social (wedding engagement) announcements, invitations, etc., are all printed on the same type of stock, hence are listed together in the usual price list or catalog.

C

Cabinet—An enclosed receptacle for type cases, cuts, and similar material, the top of which may



Flat Top Cabinet

be used for a portable press, for making up forms, etc. Open sided receptacles for type cases are usually called racks or stands.

Calendered—paper which is polished is said to be calendered.

Sized and super-calendered, or S. & S.C. paper, as it is known is very often used for jobs in which there are halftone cuts. S. & S.C. is understood to mean that the paper has had size added and given a special calendering. This is sometimes done after the paper has been all finished and cut.

Caps—Capital letters.

A B C D E F G H

Caption—Heading on article, chapter, page, section, descriptive line over or under illustration.

Card Indicators — The heart,



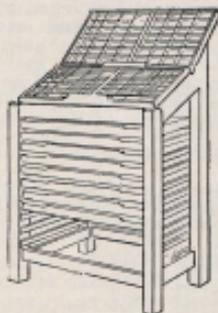
Card Indicators

spade, diamond and club symbols used on playing cards.

Caret—A proofreader's mark used to denote an omission from the set-up work of a letter, word or line, or to indicate a similar addition to be made. (A)

Case—familiar to all our readers, for instance type case, rule case, cut storage case, etc.

Case stand or case rack—A frame made to hold type cases,



*Open
Style
Case
Stand
or
Rack*

usually applied to those without closed in back or side, these latter usually being called cabinets.

Caslon, William—Born in 1692, died 1766. One of earliest Eng-

This type is **CASLON**.

lish type founders, and designer of the type that bears his name.

Casting Box—Metal box used to make stereotype casts. Before the advent of electrotyping, stereotype casting was done by most printers.

Casting off—Measuring type to find out how it will divide into pages, or sizing up the copy so as to determine the number of type set pages the copy will make.

Catalog Letterhead—A sheet with letter on the first page and advertising on the remaining three. Sometimes bond paper is used, sometimes book paper, and sometimes a special paper made with a bond surface on one side, coated on the other.

Catchword—Word at the top of the column, as used in dictionaries; in books of long ago the first word on a page was repeated at the right hand bottom corner of the preceding page, to help in continuity of reading; this likewise was called the catchword.

Caxton, William—Born 1422, died 1491. First printer of English books in England.

Cedilla—Accented letter (ç) indicating that letter should be pronounced as an s (soft c.)

Cellulose—The basic material of all paper, obtained from many sources, including cotton, wood, cornstalks, etc. The purest cellulose comes from cotton or flax, hence the demand for old rags in making high grade writing or bond paper.

Chapel—Printing was at first very closely identified with the church, so much so that many printing terms reflect this connection. One of these is Chapel, a term now applied to the organization of union printing employees in a union printing office. One of the men is elected chairman, and handles all questions between the other members of the chapel and the employer. Chapel laws are union rules.

Chargeable Time—Time consumed on work which can be charged directly to a specific job, as contrasted with time which normally cannot be so charged, and which is consequently part of the overhead.

(To be continued)