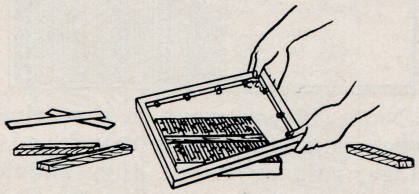
## LESSON EIGHT

## Removing the Chase From the Form

Most printers when ready to lock up the form, lay the chase over it. This is easier than placing the material in the chase, and there is also less likelihood of the fingers brushing the edge of the chase, with possible loosening of their grip on the type.

In the same way, when the job is printed, you'll find it more convenient to remove the chase from



the form, as shown. The form will then be free from any encumbrances, and may be disposed of as desired.

## Distributing Type

Putting type back in the cases is just as important as the setting, because if type is not distributed properly future jobs will be full of wrong letters.

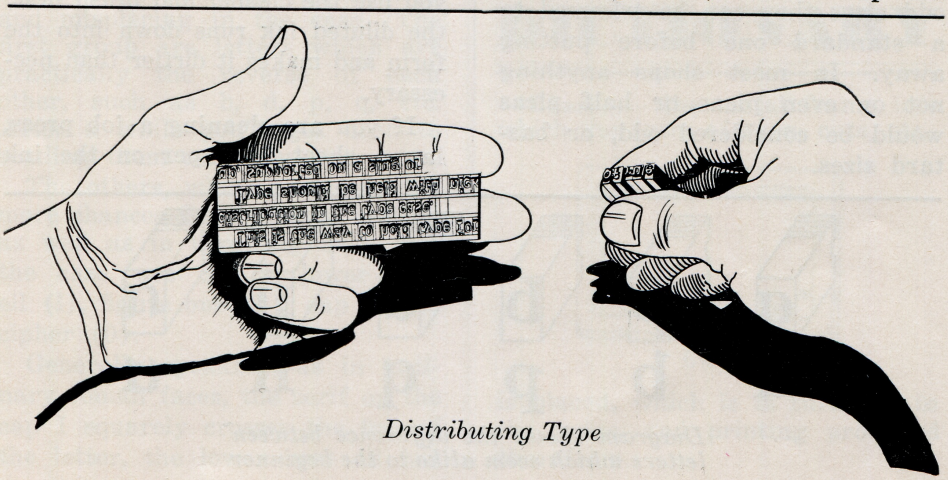
Our picture shows the method of holding the type while distributing it in the case. Start with one or two lines, rather than the quantity shown, if you have any doubts about handling more at first. See that there is a lead or piece of brass rule under the lines before you balance them. The nicks should be up. Hold in the left hand; take a word or so in the right hand, and by rolling the

*Roll it, to loosen one from another*

type slightly as you throw it in, you will separate it if the letters stick together. Spell the letters or word out as you throw in; it will help to get them in the right places.

Be sure before you start that the type is all one face and size. Go through the form in advance and separate the lines of different types. If there are more than one kind in a line, watch for those lines when throwing in.

To clean up a mess of pi, or jumbled type, remove the lead slugs, rule, etc. if any; take your composing stick, and set up the

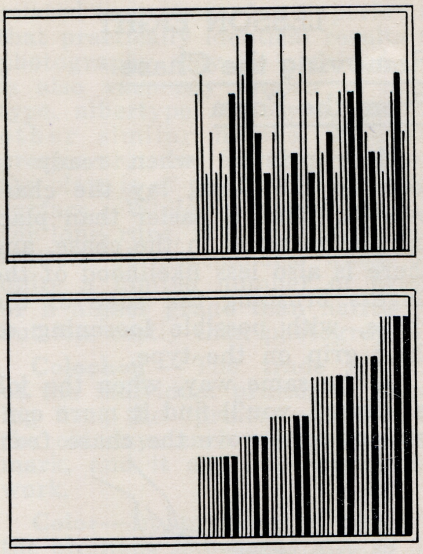


*Distributing Type*

largest size of type, distribute it, then take the next largest and so on down to the smallest. Nicks will be found convenient for distinguishing more than one type of the same size from the other, but not conclusive, because of late years, with the newer casting equipment, founders have not been keeping to one nick for a style of type as they used to. However, you can ascertain how far the nick can be followed when you come to distribute your type. A little water sprinkled over the form with a sponge will make it handle easier — less likely to pi. Make sure all wood reglet, furniture or cuts are removed first as the water will warp them.

## Distributing Leads and Slugs

These can be gathered together in a galley or some other convenient receptacle so that the ends can be jogged up. This will leave them so that you can pick out the longest, put them at the end, then take the next longest, place them next, until you have them all sorted according to lengths, with the shortest at one end, the longest at the other. They can then be placed in the lead and slug rack, in their allotted spaces. Be careful to check them with a line gauge so that if there are any odd sizes they can be trimmed to a standard one before putting away. In most shops anything not on even picas or half picas would be considered odd, or bastard sizes.



Note: If you want to save time when you are putting away leads, slugs, rule or reglet, they should first be sorted according to size. You can then tuck them away in their allotted places much more easily and quickly than if you attempt it from the galley as shown in the first picture.

## Cleaning the Press and Form

Remove the form from the press and wipe the type off with a cloth dampened with cleaner, then use cleaner and brush, if necessary. If you use the cleaner and brush first, the diluted ink runs down into the form and makes it dirtier than necessary.

If you are cleaning a job press, lay a sheet of paper on the ink

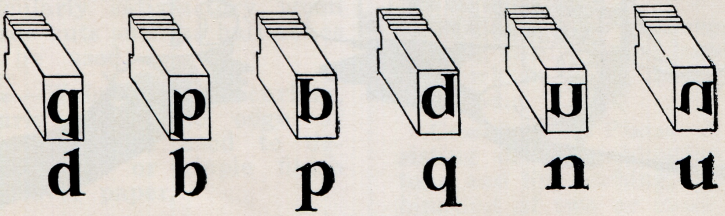
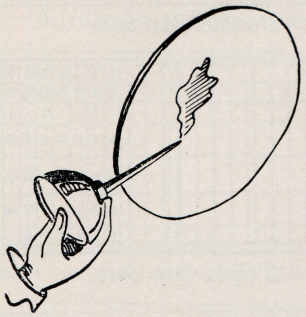



*Diagram shows the difference between letters which seem alike to the beginner*

disc, and run the rollers over it. Take off as much ink as you can that way, then use cleaner on a rag to finish. Make sure the plate and the rollers are absolutely clean and free from lint.



*Squirting Oil from Oil Can on Ink Plate to Mix with Ink and Make Cleaning Easier*

## Cleaning and Preserving Rollers

Regular printers' rollers are made of a composition which is affected by heat, cold, moisture or lack of it. Printers in the northern states usually require a softer composition in winter and a harder composition in summer, partly because heat has a tendency to soften rollers, and winter cold to harden them, but also because artificial heat used in winter dries the air in the pressroom, and robs the rollers of their moisture, while greater humidity in summer does its part to soften them and make them tender.

Printers further south, to the extent they use heat in winter, will also require winter rollers, but those on the gulf coast usually prefer hard rollers the year round. On the other hand, printers in some parts of the Pacific coast find that their damp winters require harder rollers, while dry, hot summers dictate using a softer roller in that season. This may seem to leave the question of the proper roller pretty well up in the air, but each printer will have to be governed by weather conditions in his locality and his own experience.

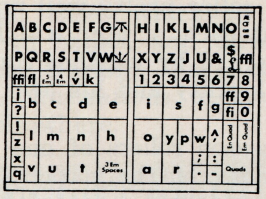
All season rollers of one kind or another are on the market. Among these are rollers made with plastic or synthetic compositions which were introduced in the last few years. Generally, they are more expensive than rollers made with standard printers' composition.

To properly preserve regular rollers requires care in cleaning them. Gasoline, benzine or such cleaners have a tendency to dry them out and make them hard. Kerosene, range oil or some of the cleaners made for the purpose are better. When not being used they should be coated with oil, all over (surface and ends) and put away, preferably in upright position.

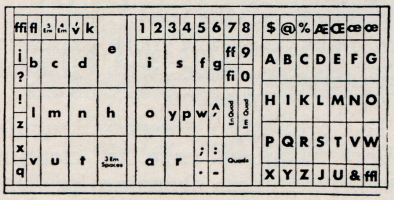
Do not use water in cleaning a regular composition roller, and be careful not to rub the surface of the roller so hard in cleaning it that you remove or otherwise damage its finish. A good roller is slightly tacky (sticky) to the touch, but the surface is very smooth, and must stay that way for best results. Allowing rollers to remain on the ink plate or anywhere else on their face for any length of time will flatten them. Sunshine or proximity to heat pipes will cause lopsidedness and even complete melting.

## Type Cases and Cabinets

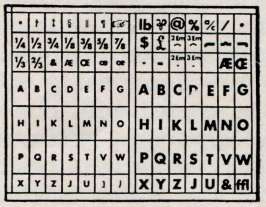
Over the years many people have had ideas about changing the arrangement (lay) of type cases. A few of them have even gotten so far as to appear in printing supply catalogs and attain a limited use. Most of them have disappeared or are not very often seen. Cases were at one time made in one-quarter, one-third, two-thirds, three-quarters and full



*California case two-thirds size*



*California case full size*

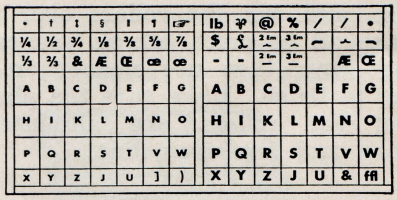


*Cap case two-thirds size*

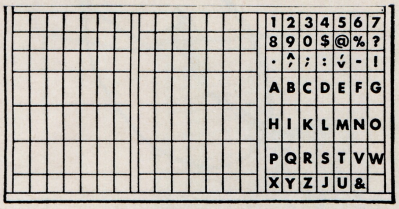
size. The one-third and three-quarters sizes are no more. The quarter size is handy because four of them will fit into a blank full size case, which is 16⅝ inches by 32 3/16 inches. The two-thirds have maintained their popularity because they save space.

For ordinary type fonts having both caps and lower case, the most popular style is that of the California case, made both in two-thirds (16⅝ inches by 21¾ inches) and full size. In the full size the caps are carried alongside, while in the two-thirds they are grouped together at the top. No other cases made for both caps and lower case letters have any great popularity at present.

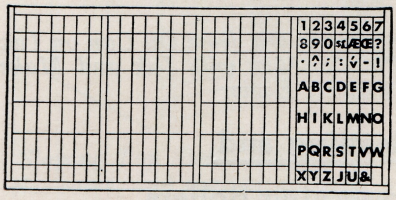
For type with caps and figures only, you have a somewhat wider choice. There is, first of all, the cap case, which is really the upper half of the old news case combination. When newspapers were set by hand, a pair of cases were used, the lower being entirely for the



*Double Cap case*



*Triple Cap case*



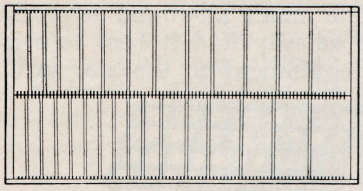
*Quadruple Cap case*

small letters (hence the expression "lower case"). Actually the so-called cap case was and is a double cap, having two identical layouts side by side. In the old newspaper days small caps were put in one of them. At present this case provides room for two different fonts of caps. It is made in both full size and two-thirds.

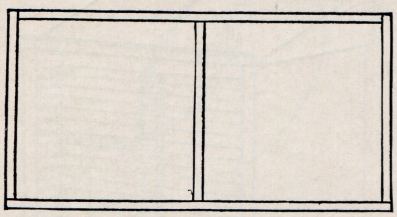
The same case, divided into three layouts, is called a triple case, and with four layouts, is a quadruple case. The triple and quadruple are available only in full size.

Full size cases with adjustable slats have many uses, including the keeping of wood type, furniture, reglet, leads, slugs, borders, rule, etc. Blank cases, made in both sizes, are likewise handy for the same purposes, as well as for storage of cuts, electros, etc.

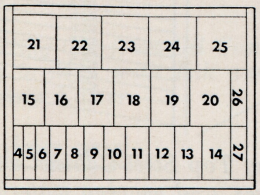
Lead and slug cases, which may also be used for reglet and furniture, are made in both two-thirds and full size.



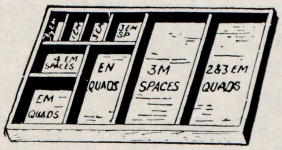
*Adjustable full size case*



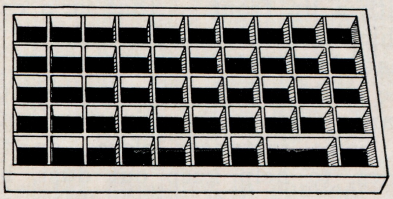
*Blank Case full size (with center bar)*




*Lead, Slug or Reglet case, ⅔ size*

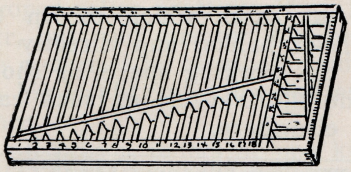



*Quarter-size Space and Quad case*

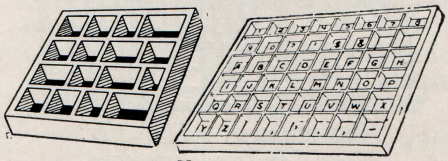


*Quarter-size Cap and Figure case*

Quarter size (7⅜ x 15⅛) cases, being easily portable, find much favor for spaces and quads, rule, caps and figures, leads and slugs, borders, thin spaces, ornaments, handy packs, and the like. Moreover, as already mentioned, they may be kept, four together in a full size blank case when not in use. If for instance, 8 point spaces and quads are scattered around in various eight point cases, you may frequently be running out, where-



*Quarter-size Brass Rule case*



*Thin Space case* *Square case*

as, if you keep them all in a one-quarter case, you will find it much handier and more economical, as well as time saving.

Thin spaces, being very light, and taking very little room, may be kept, all sizes from six points up, in one 12½ x 12½ case. This case, with 48 compartments is also used for cap fonts, figures, auxiliaries and accessories.

This just about completes the list of present day cases, with the exception of some specially tailored jobs that fit on steel working cabinets, with which the printer will have no difficulty in familiarizing himself if he is called upon to use them.

The layout of the California case follows the traditional scheme, which nobody seems to be able to improve upon. The most commonly used letters are the closest to the printer's hand, with the size of the compartments depending on the frequency of use as well. This gives "e" top billing, followed by u, t, a, r, m, n, i, o, s, c and d.

The various cases described are practically all of them made in the wood lip front style and in the steel cabinet front variety. Quarter size cases fit equally well in both kinds.

Sloping top steel cabinets can also be provided with spacing

material cases which fit on the overhead banks, and directly behind the working space, as shown in the illustrations of such cabinets elsewhere.

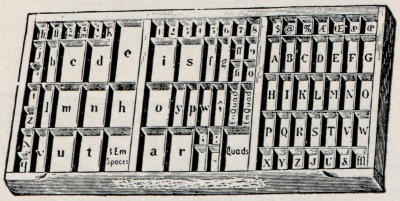
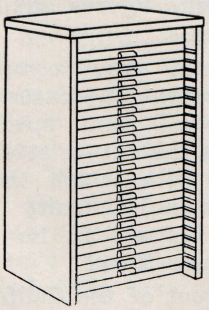


*Illustration of a Style "L" Wood Lip front type case.*

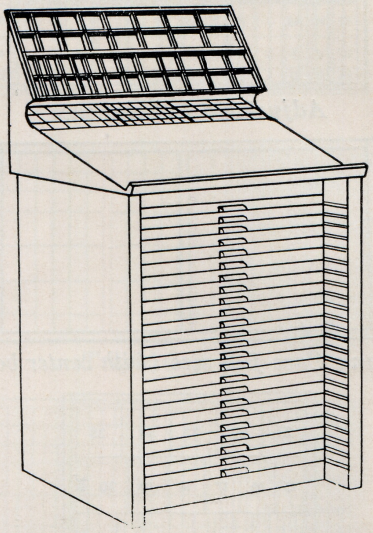
Printers with lip front cases can purchase empty steel cabinets, shave off the lips of their wood cases, paint the cases the same color as the cabinet, and mount the label holders and drawer pulls. They will then have the same space saving equipment as the printer who buys his cabinet complete with cases.



*Flat Top Steel Cabinet with ⅔ cases*

Both the steel and wood equipment includes sloping top units, for ease in setting up and making forms; high flat top cabinets and racks for material storage; and lower flat top units on which work may be done. The latter includes imposing surfaces, under which are compartments for reglet, furniture, miscellaneous items, and even type cases. There are also many specialized cabinets and units for newspaper offices and for others who require equipment a little different than the general printer.

The small all-round job printer will usually find it best to confine his equipment to the standardized



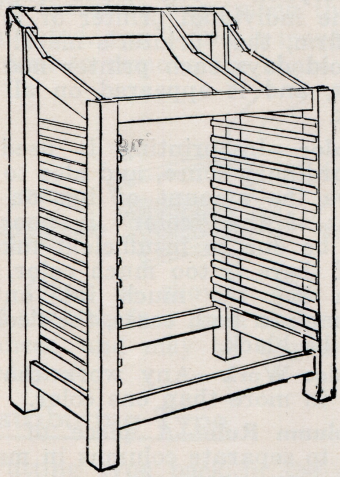
*Sloping Top Steel Cabinet with full size cases, and spacing material cases*

racks and cabinets which give him the most convenience for the least money and space.

Cabinets and furniture for holding type and related cases are made in two styles. The all-wood variety is designed to take cases with a lip front — that is, a case which is beveled off at each end so that the hands can be inserted in the rack and the case pulled forward. Such racks and stands are in some instances closed on the sides, to help keep out dust, but usually are left open. They are much less expensive than other kinds, because there is a minimum of material in them; and they can be shipped knocked down — that is, flat without the necessity for boxing or crating.

The second kind is of steel, with closed-in ends and sides. Cases for these have a flush, low front, with label holder and drawer pull, finished off to harmonize with the cabinet. The absence of the lip on the case, and the use of steel

runs for the cases to slide makes possible closer fitting, so more cases can be gotten in the same cabinet. Much less dust and dirt get into such cabinets. Because of these advantages, steel equipment is used in all large modern printing shops, but the small printer must carefully assess the pros and cons for himself. The lower price of the wood lip front variety is a powerful argument in its favor if funds are limited.



*Sloping Top Wood Case Stand*

## Getting Similar Characters In Their Proper Places

There are two kinds of type characters which lead to confusion and misplacing in the case. The first group are letters which are practically the reverse of each other, such as b, d, p, q, etc. After a while you'll get used to reading them correctly.

The others, which perhaps offer more chances for errors in setting as well as in throwing back into the case, are cap I, lower case ell (l), figure one (1), cap O and cipher (0).

Generally speaking, as in ordinary roman faces, the serif on the cap I squarely crosses the top of the letter, the lower case ell has a short curved serif on the left (right in the type) and the figure one has a bigger serif than the lower case ell (see illustrations).

I l 1 O 0

*Examples of letters easily confused*

Most cap O's are wider than the cipher, as you will also note from the samples shown.

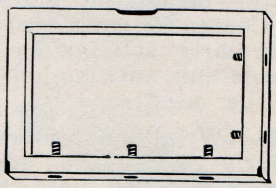
The figures 6 and 9 should be watched, but as the nick identifies them there should be no trouble outside occasionally placing them in the wrong compartment through carelessness. The same applies to lower case n and u.

### Lesson Eight—Questions

1. *Describe how you go about distributing type — precautions to be taken, etc.*
2. *What is the easiest and quickest way to distribute leads and slugs?*
3. *What characters are easy to misplace because of their similarity?*
4. *Give the steps in properly cleaning a type form.*
5. *Why may you need different rollers in winter than you use in summer?*

## The Printer's DICTIONARY

**Chase** — the metal frame into which the form of type, cuts, etc.,



*Chase*

is placed, which is in turn put in the press, and printing produced therefrom.

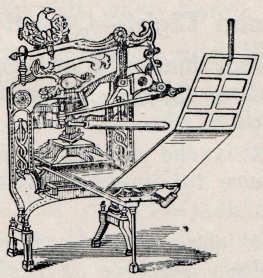
**Chipboard**—Board made from lowgrade pulp, waste, etc., such as pad back board. Much used for boxes and containers but not where strength is a consideration.

**Chroma**—one of the three "dimensions" of color, which are: Hue, Value, Chroma. Chroma defines the strength (intensity) or weakness of a color *as a color* and not in terms of its lightness or darkness.

**Chromo**— A print from a species of lithography in which there is a separate run for each color.

**Close Matter**—Type set without leads and with few short lines or paragraphs.

**Clymer, George** — Inventor, in 1816, at Philadelphia, of the first lever press, as contrasted with the



*Clymer's Columbian Press*

previous screw style which had been used since the beginning of printing.

**Coated Paper** — Book paper of high grade, having a coating to provide an extra smooth surface for printing—enamelled. The coating or enamel is usually a mixture of various substances, among the more important being china clay, or chalk, glue, and flour. Some paper mills make a distinction between coated and enamelled paper, the latter being the more high priced. Coated or enamelled paper is particularly satisfactory when high grade cuts such as half tones are to be used.

**Cockle**—Wrinkling or curling, particularly along the edge of paper. Sometimes used to describe a rough or ripple finish bond or cover paper.

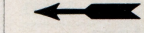
**Collotype** — The photo-gelatine process of printing, very closely related to gravure, but superior in that practically identical results to photography may be obtained. It is also variously known as artotype, albertype, heliotype, and by other similar names. Special presses are used for the work, and the plate is of glass, with a gelatin surface. While it is not suitable for long runs, it is ideal for illustrations of merchandise which require a limited number of prints of a higher grade than halftones, but less costly than photographs.

**Colophon** — The trade emblem of the individual printer or printing firm, the "printer's mark." In the old days each printer had his mark, and it appeared on all his work.

**Color**—In printing is used in the ordinary sense, and also to describe the amount of ink on the page; if the "color" is poor, it may be due to insufficient inking, or if there is too much color, the form has too much ink on it, although in both cases, the "color" may be black.

**Color Work**—Any work that is done in more than one color.

**Column Rule**—A piece of rule used to separate columns in magazines, newspapers, etc.

 This is column rule.

**Combination Monograms** — Individual letters made in monogram form, so that combinations of two, three or more will have the appearance of especially made mon-

*Combination Monograms*

ograms. Used on stationery, cards, playing cards, match boxes, and on all work on which monograms are required.

**Combination Plate**—A cut consisting of a combination of halftone and line etching, or any combination of two or more processes of engraving in one plate.

*(To be continued)*