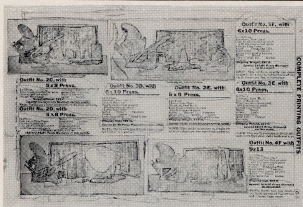


A. Trial impression without makeready



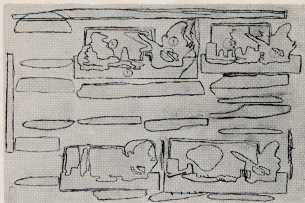
B. Markings on trial impression in showing parts needing overlay

LESSON TWENTY-ONE

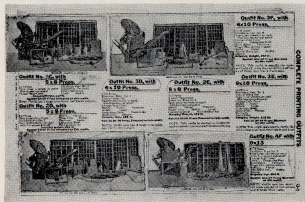
Examples of Makeready (Overlay)

Figure A is the original impression of the page, taken on the

press without makeready. Figure B shows this same sheet with the parts outlined in pencil which must be built up on the back. Figure C is the back of the same sheet, showing the paper overlays pasted on to correspond to the markings



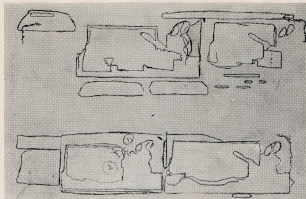
C. Back of sheet B showing how thin pieces of paper have been pasted over it to give various additional impression. Spots marked "2" have two thicknesses pasted on



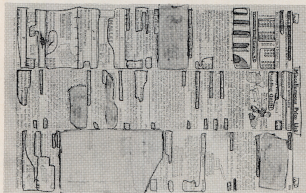
D. Trial impression made on press after overlays "C" were put on with markings which result in another makeready sheet

on the front. A piece of carbon paper with the carbon side up was used to get the correct markings on the back. Note that there are

two overlays in parts, designated by the figures 1 and 2. These spots required more building up than those where singles were used.



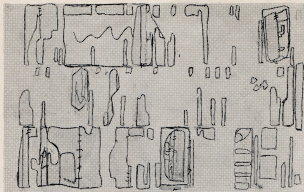
E. Reverse of D showing pasted up spots. When this sheet was inserted under tympan the page came up satisfactorily all over, and was ready to run



G. First proof of type page, with markings, and a few overlays pasted on the front side to save inserting another sheet under tympan

This pasted up page (called a spotsheet) was then inserted under the drawsheet and 2 pieces of book paper on the tympan, and another impression was taken. Figure D is the result, which, as you will

see, required further attention. Figure E is the reverse side of D after the necessary overlays have been applied. This was inserted under the drawsheet plus 2 book paper sheets in addition to



H. Overlays applied to back of G, BEFORE putting those on which show on the front

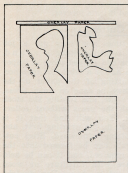


I. The finished type page, after use of overlays as shown in G and H

the first pasted-up (spot) sheet, and the final result was the page as it was finally run on the press — good clear impression, with snappy, lively halftones.

Figure G is a page of type, marked up in the same way as

Figure A. Figure H shows the other side, with the applied overlays. The impression taken after these overlays were made, showed the necessity for a little more building up in the spots which have paper pasted over them in



BACK OF MAKEREADY SHEET



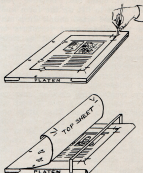
FRONT OF MAKEREADY SHEET



The Finished Job

Figure G. To save making up another sheet, these were applied to the FRONT of the sheet, as shown. In other words, Figure G when it first came off the press did not have the completely blank spots on it, which are caused in our illustration because it was later pasted up on the front as well as the back. Figure I is the page as it was finally run on the press, with both front and back overlays in place.

This page, as well as the one showing the halftones, had the spot sheets placed under not only the



How to locate makeready sheet under tympan. For detail instruction, see Lesson 5.

drawsheet (top sheet) but also under two sheets of book paper. This has a tendency to smooth off what would otherwise be sharp outlines where the pasted up spots are located.

Makeready of this kind produces finer work with less impression than would be required if the whole form were given more squeeze, and is always used where quality work is desired.

Metal Furniture and Quotations

For the filling in of long, straight spaces, wood furniture will do the trick as well as anything, but when you have spaces more nearly as wide as they are long, metal furni-



Metal Furniture

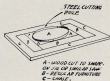
ture and quotations can't be beat. Very accurate furniture is absolutely necessary around display material, cuts, etc., because you don't want to lift up the form and have a good sized chunk drop out and pi. When wood furniture is new, it is accurate, but as time goes by and the wood gets worn, it cannot be trusted as it could at first. Moreover, short, fat pieces of it require extremely accurate sawing, and unless you have some kind of very trustworthy circular saw to cut it on, you may saw it ever so slightly on a bias. That little bit of crookedness may be all that will be necessary to cause the form to bulge, and if it doesn't pi, create a lot of trouble in getting the job to look straight.

Metal furniture, on the other hand, comes in short, wide pieces that may be put in the form with the absolute assurance that it is accurate. If you need an equal amount of space on each side of a cut, you can get it with metal furniture or metal quotation furniture. There is no wear to it; it does not bulge, swell or shrink, and once you have it, it is good forever. Much time can be saved in getting a job ready and getting it right by using metal quotations and metal furniture. Like quotation and metal furniture, cast iron furniture, while

more expensive, is extremely accurate and it lasts forever.

Steel Cutting Dies

At times you may get a job which requires either a round, oval, or odd shaped piece of paper—such as for a label, for instance. The cutting of the paper or the card may be done on your press, using a die, and feeding the stock through the press without rollers or ink. You will find that it is easier to do the printing first, and the cutting afterward. Steel cutting rule can be formed into the shape required, and it can be held in place with furniture or wood blocks cut to shape. For straight cuts, the rule need only be cut in pieces, and carefully joined. For curved or circular work, the rule



should be heated to remove the temper, bent and hardened again. Some printers claim that on curved jobs, it is best to get hold of flat spring wire about an inch wide such as the spring from an old phonograph and use that. The wire will have to be given a sharp edge with a file before using.

Many printers make the die a permanent fixture by pouring melted lead or type metal in around the rule.

Dies of this kind may be made for cutting out envelopes of odd sizes in small quantities. A thin sheet of zinc can be used on the platen for a counter die—or lead, although plain lead is a little soft. Sheet copper, brass, or aluminum will also serve. Tin is too hard, because it is really tin plated on steel. Try making a die sometime and see what the possibilities are.

Type Styles

Type styles come and go. They pass thru cycles, just as fashions in clothes. It is obvious that, even at any given time, nobody can say a printer should have such-and-such faces of type, because any type founder's sales will show far more styles of type in good demand than any one printer can afford.

Type selection, therefore, must be governed by your personal choice for the kinds of work you are doing, and your choice will depend to some extent on customer's preferences as far as they express them, either directly or thru the samples they submit to you for reproduction. Do not, however, become stampeded into buying a lot of different styles when you already have type of the right kind, but need more of it. Enough of a few sound designs will be of far more use to you than too little of many.

Save samples of printed matter that appeal to you, and watch advertising in metropolitan newspapers and magazines. In that way you will pick up many ideas, not only of proper layouts, but on type styles which are useful, attractive and popular. You'll have to buy new styles of type at times, to properly execute orders, but frequently you will find a satisfactory substitute in your own cases.

Lesson 21—Questions

1. What is a "spotsheet"?
2. Why is it "buried" under at least two sheets of book paper in the packing?
3. Is one spotsheet enough or are two always necessary?
4. Why are metal furniture and metal quotations better than wood furniture?
5. How would you make a die for cutting out odd shaped labels, etc., on your press?

In Conclusion

With this lesson the Printing Course concludes.

It has been a source of great satisfaction to us that so many printers with experience have taken this course as a "refresher", even tho it was written for those with little or no previous training.

We welcome any and all suggestions. The course is the result of over ninety years' close contact with printers of all kinds, and the furnishing of instructions to them and to beginners. But, like the experienced printers who have been following this course, we know we have no monopoly on ideas, and welcome fresh viewpoints.

We hope and feel confident that the course has been of help to you, and that you have carefully preserved the lessons so that you will have them for future reference.

The Printer's DICTIONARY

Wickersham Quoins—Devices for locking or tightening the form, consisting of a small rectangular box, in which are two wedges held together by small springs, and in the center a circular eccentric wedge, with a square hole in the



Wickersham Quoin

middle for insertion of the key. Turning of the circular wedge with the key spreads the other two wedges apart, tightening the form, while the springs bring the wedges back, loosening the form, when the key is turned further or turned back.

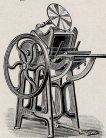
Widow Line—If, in making up the page, the printer uses a line with a single word by itself at the top of the column, he has left a "makeup widow." To put a lone word (the end word of a paragraph) in such a position is considered poor workmanship, and rather than to do that it is customary to space out the previous line to bring more words onto the last. It is not customary to use anything but a full line at the top if at all possible, and if the number of words in the sentence won't normally fill the line, they are either spaced out so that they will, or another line brought over to head the column or page.

Window Envelopes — Envelopes having a piece of transparent paper set into an opening in the front so that the address of the letter inside, when properly folded, will show thru and make a separate address on the envelope unnecessary.



Wire Side — The rougher side of a sheet of paper. This side comes in contact with the wire cloth on the paper making machine, and often the faint outlines of the "wire" may be seen.

With the Grain—Paper and cardboard have a "grain," that is, the fibers of the paper are all in one general direction. Many papers and cardboards fold much better along the direction the fibers take than they do the opposite (against the grain). There is likely to be less cracking when the folds go with the grain.



Woodcut

Woodcut — A cut for printing made on wood. It is not usually printed from, but is electrotyped, and the electrotype is used for the actual printing. Up to around sixty-five years ago, when halftones came into common use, woodcuts were the common method of illustrating, but there is so much skill required to make one, that the cheaper halftones soon super-

seded them. In the days of woodcuts the wood engraver was just as important if not more so than the artists who made the design, because a poor engraver could not satisfactorily reproduce the work of the artist. With the advent of halftones it was possible to make photographic reproduction of art work, and the skill of the wood engraver was no longer necessary. In the last several years there has been a revival of wood engraving for some high grade illustrating work, but the number of competent men in the business is now very restricted, and high prices for really good work are the rule. Of course, a certain grade of woodcut work has always been used in mail order and wholesale catalogs where it has not been felt that other processes would satisfactorily bring out detail on the kind of paper being used for the printing.

Wood Type—Type faces cut on wood. Large sizes cost much less than would metal type of the same size. In the early days of printing, wood type was used exclusively.

Work and Turn—If locking up the whole form at once so that making the same impression on both sides gives you two complete jobs, you have done it "work and turn."

Wrong Font—Used mostly as a proofreading term, the letters w. f. when indicated on a proof mean that type of the wrong size or series are mixed in the set-up matter.

Z

Zinc—The much used term for a zinc etching or engraving; that is, a printing plate or cut with a zinc face which has been etched away so that the parts which are to print are the only ones left type high. Line etchings and coarse screen halftones are very often zincs. As in the case of woodcuts and other printing plates, it is customary to keep the zinc as a model and have an electrotype made from it if it is to be used for very long runs, altho actually the zinc will last much longer than the ordinary electrotype, because the zinc is tougher and harder.