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Lettering

**for
Extension
Visual Aids**

U. S. DEPARTMENT OF AGRICULTURE
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Lettering FOR EXTENSION VISUAL AIDS

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**MORE SPACE
BETWEEN WORDS
THAN LETTERS.**

**LETTERING
SHOULD BE
PLANNED.**

This handbook is not intended for the professional artist or sign painter. Its purpose is to suggest various lettering techniques that may help extension workers to make their own posters, flash cards, flannelgraphs, charts, and other visual aids.

Reading matter is often an important part of a visual aid. Sometimes, as on many flash cards and signs, it is all of it. Yet, how often is this reading matter so poorly lettered or "printed" that it is all but impossible to read.

Good lettering is orderly. This means that letters supposed to be the same size *are* the same size. It means that lines of lettering are parallel, unless they are deliberately put at a slight angle for emphasis. It means that there is more space between words than between letters. It also means that letters and spaces are as large at the ends of lines as they are at the beginnings. In other words, lettering that runs uphill or downhill unintentionally is not inviting to the eye. Phrases

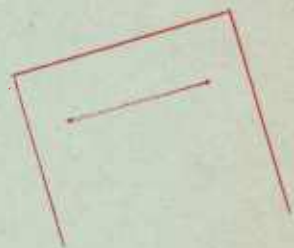
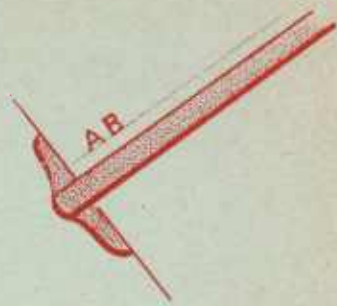
and sentences made up of uneven letters and spaces are not only unattractive but hard to read.

Lettering should be planned. When lettering by hand, professional sign painters take the time to put in light guide lines indicating where the tops and bottoms of letters should be. They usually lightly pencil-in the letters, and then, when inking or painting them in, are careful to make all letters toe the marks of the guide lines. Certainly the beginner should do the same.

To rule in parallel guide lines on average-sized posters, charts, and the like a T-square is usually used. If no T-square is available, however, an old method will work. By placing two dots, one on the right side of the paper or board and one on the left, both the same distance from the top, and by then ruling through them, a line parallel to the top of the board will, of course, result. When several parallel lines are needed, the process is repeated, the first line becoming the point from which other lines are measured.

In all lettering, proper spacing between letters is important. When capitals are lettered, a good general rule is to make all spaces the same, with the exception of those around curved letters and *I*. Less space is left around curved letters than around straight ones because each curve itself leaves space. More space is left around *I* because the letter is so narrow that it becomes almost lost if it is not set off by extra space on either side. Therefore, in the word *HOME* less space is

ABCD



HOME
HIM

left around the *O* than around the *I* in *HIM*.



Mechanical and Ready-Made Lettering

One line to indicate the bottoms of letters is usually enough when mechanical devices and ready-made letters are used. In most mechanical sets, templates or tracing guides carry impressed letters that are easily copied on paper or board. Some sets offer a variety of sizes of one simple type of letter, both straight and italic. (Italic or slant lettering is good for emphasizing a word or a phrase, but straight lettering is considered easier to read.) Other mechanical sets offer a variety of kinds of letters as well as of sizes. The latter are likely to be expensive, but sets capable of making fast lettering of a limited size and style are rather moderate in cost. Some template-set lettering is suitable for circular-letter headlines. That of others is especially good for signs, graphs, and charts.



For lettering on cover pages and mastheads, several ready-to-use letters can be recommended. Some come on wax-backed sheets of paper, each sheet containing a complete alphabet, numerals, and punctuation marks of one size and kind of lettering. The letters desired are cut with a razor blade from the sheets, placed where wanted, and then rubbed with a rounded surface until they adhere. Other ready-to-use letters come in small tabs printed on both sides. They are set in a self-aligning composing stick; then,

after transparent scotch tape has been placed over the set-up words, they are pasted on paper with the shiny side of the tape down. Transparent letters are available for use on film.

For those who have photographic assistance, trick effects may be made by photographing set-up letters in perspective, in curves, and at angles.

The foregoing ways of lettering are good. However, some of them produce letters that are too small for exhibit or lecture purposes, and others, such as the wax-backed letters, show patching and reflect glare when seen without the intervention of photographic reproduction. Most posters and exhibits require some large, bold lettering. Ready-made letters of cardboard or composition board are good for this purpose. When tacked or glued to poster or exhibit board, each letter casts a slight shadow that gives a three-dimensional effect.

Gum-backed letters, ready-made of white or black paper, may be purchased from art and stationery stores. Usually these are an inch or less in height. When their backs are moistened they stick like postage stamps.

Stencil sets also make lettering suitable for display purposes. Pencil or crayon may be stroked over the stencil onto the paper; ink or paint may be brushed on; special paints may be sprayed on. For neat results, it is sometimes best to trace the outline of each letter in pencil and then to fill it in with crayon or paint. Many stencils carry

CURVED PERSPECTIVE



guides for spacing. Stenciled letters are good for a word or a phrase, but in bulk they can become monotonous.

It may be mentioned also that rubber-stamp alphabets can be useful, particularly on statistical lecture charts. Such letters are available in heights up to several inches. Usually they are used with stamp-pad ink, which is slow in drying unless stamped on cloth. Poster or tempera paints, if spread on a hard surface such as glass, may also be used, but care must be taken in the way in which the stamp is pressed into the paint and then against the final board or paper. If too much paint is on the stamp it will squeeze out around the edges of the letter.



FLASH

Hand Lettering

There are times when nothing will do the job so well as hand lettering. This is true when a "flash" word is needed on a poster or exhibit. It is true when no mechanical or machine-made letters are just the proper size for the space allowed. It is true when distinctive lettering is desired. Letters cut from paper or made with pen or brush, if well done, will have individuality.

In general, there are two classes of letters, those with serifs, or "spurs," and those without. Since the latter are easier to make, they are the only ones dealt with here.

Cut-out capital letters are not too difficult to make from the kind of tape used in many stores for closing the ends of



packages. The tape is unrolled, then cut into squares of similar size and into rectangles of similar size. These are the beginnings of block letters. The wide *M*'s and *W*'s are cut from the squares; the other letters, with the exception of *I*, are cut from the vertical rectangles. Since a roll of tape is of the same width throughout, the letters cut from it will be the same height. Care should be taken to make the strokes of each letter the same thickness. Penciling letters in before cutting them is a good idea. The cutting of symmetrical letters (those whose sides are the same, such as *A*, *H*, *M*, *O*, and *U*, and those whose tops and bottoms are the same, such as *B*, *C*, *D*, *E*, and *S*) will be simplified if the rectangles are folded in two. Whether the fold is from side to side or from top to bottom will depend upon the letter, of course. When completed, these home-made letters, like their commercial cousins, may be stuck down like postage stamps.

It is possible, of course, to cut letters out of paper other than that which comes in gummed rolls. Many attractively colored papers lend themselves to this treatment, but if these papers are used, the heights as well as the widths of letters must be measured.

Another way of making block capitals is by using strips of opaque scotch tape $\frac{1}{2}$ - or $\frac{1}{4}$ -inch wide. A strip of tape is unrolled, laid on the board or paper on which it will appear, cut, and the roll then lifted away, leaving the strip of tape. Vertical and horizontal strips are added





with equal ease. To make an *H*, for example, two vertical strips are placed, cut, rubbed down, and then a horizontal strip is run between them, cut, and pressed down. To make a curved letter, such as an *O*, a rectangular box is built of two vertical strips joined at their tops and bottoms by two horizontal strips. The corners of this box are then cut away with a razor blade and the letter *O* emerges from the box. Since scotch tape comes in several colors, the letters thus made can be colorful as well as bold. Tape capitals frequently will do as good a job as similar block capitals painted directly on the board or paper, and are easier to make.

In painting block capitals, their sizes, spacing, and the width of their strokes should be worked out carefully in pencil before ink or paint is applied. When this is done, outlines of letters are put in with a pen and ruling pen, and these outlines are then filled in with ink or paint.

Hand lettering with pen or brush requires more planning than mechanical lettering does, but anyone who can write can letter if he will be patient enough to pencil in guide lines and letters, and then will follow his pencil marks.

All capitals may be made the same width with the exception of *I*, *M*, and *W*. Sometimes *A* and *V* are made a trifle wider than letters such as *B*, *E*, and *F*, but narrower than *M* and *W*. In some alphabets curved letters are more rounded than in others. The *O*, for example, may be a complete circle, or it may be oval. If



oval, its side strokes may be curved or they may be rather straight. Whatever kind of letter is decided upon in the first place does not matter, but once used in a piece of lettering it should be repeated consistently. Many sign painters make curved letters just a trifle taller than straight letters to compensate for the space these letters lose by being curved.

Capital letters are probably easier for most people to make than lower-case (small) letters, but the latter are considered more legible. In making lower-case letters, guide lines should be ruled in, not only for the tops and bottoms of the capitals, but for the tops of small letters whose strokes do not reach so high as capitals do (*e*, for example) and the bottoms of letters that extend below the bottoms of capitals (letters such as *y*). If 1-inch capitals are used, a good relationship between lower-case and capital letters would be $\frac{5}{8}$ of an inch for small letters such as *e*, 1 inch for letters such as *y*, with $\frac{3}{8}$ of an inch of the letter below the line. In other words, small letters such as *e* should reach a little over half the height of the capitals. The upward or ascending strokes of small letters such as *h* should extend to the tops of capitals. The descending strokes of letters such as *y* should reach the same distance below the bottoms of capitals as the distance between the tops of small letters and the tops of capitals. All upward strokes of small letters reach the tops of capitals except the stroke for the *t*, which usually ends just a little short of this.

OF

HOME
HOME
HOME

THEY
They

hy

E

E



*Script
Script*



Of the various tools for hand-lettering, one of the most useful is a pen that fits into a standard penholder. This comes in a variety of sizes and the styles include pens with round points for strokes of the same thickness and square points for letters made up of thick and thin strokes. Letters with strokes of the same thickness are usually easier to make and easier to read than those that are alternately thick and thin. Script may be made with either kind of pen. Although diluted tempera paints can be used, these pens work best with India ink.

Another lettering tool is built like a fountain pen and equipped with four felt nibs of different shapes. The square nib is considered best for lettering, although the round nib may also be used to make rather casual lettering that is effective when used for occasional words on posters, flash cards, signs, and charts. If many words on a visual aid are put in with it, however, the final effect may be somewhat disorderly. With this pen comes a special kind of quick-drying ink that will work on wood and other materials as well as on paper and cardboard.

A lettering brush is the most difficult of the letterer's tools to master. Lettering brushes are specially designed, long with square tips. They may be shaped to make an even-stroke letter, but more often they are flattened out to make thick and thin strokes. The letterer usually dips them into poster or tempera paint, then shapes them on try-out paper. Ink may also be used, but for most purposes opaque water

paint is best. Oil paint on wood or metal should be used for outdoor signs.

When lettering pens or brushes are to be used, some practice will help. Guide lines may be ruled 2 inches apart, and a series of vertical strokes made between them. These strokes should be not only even in length, but parallel with each other. The same should be done with horizontal strokes, slanting strokes, and curved strokes. The brush should be held more vertically than a pen is normally held. Strokes are made from the top down and from the left side to the right with very little pressure.

Whatever lettering is used should be an asset to the visual aid of which it is a part. It should help that visual aid to do a good job. The main message of a poster, for instance, should be easily read at a distance of 15 feet. The lettering on slidefilm frames should be clear and large enough to stand great reduction. The lettering on lecture charts should be large enough for everyone in the audience to read. No lettering should be used that can be seen but not read.

Most of the tools and the materials mentioned herein, as well as many others are carried by art or drafting supply stores. In some communities they may be purchased at hardware, stationery, and book stores, and at print shops.



KIND OF LETTERING



HOW TO USE



Mechanical

**MACHINE-
CUT**

HAND-CUT

TAPE

BLOCK

GUM-BACKED

**Wax-backed
Composing Stick**

**Brush
Pen**

On charts and graphs . . .
as credit lines, on mast-
heads and cover pages
. . . as legends for ex-
hibit photographs and
slidefilm frames.

For the big message on
exhibits, displays, post-
ers, and poster charts . . .
on slidefilm titles.

For the secondary words
on posters, exhibits,
poster charts . . . on
scrapbook covers and
indoor signs.

For titles on cover pages,
mastheads, and charts
that are to be repro-
duced.

On flash cards, posters,
displays, exhibits, flan-
nelgraph parts, and
signs.

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