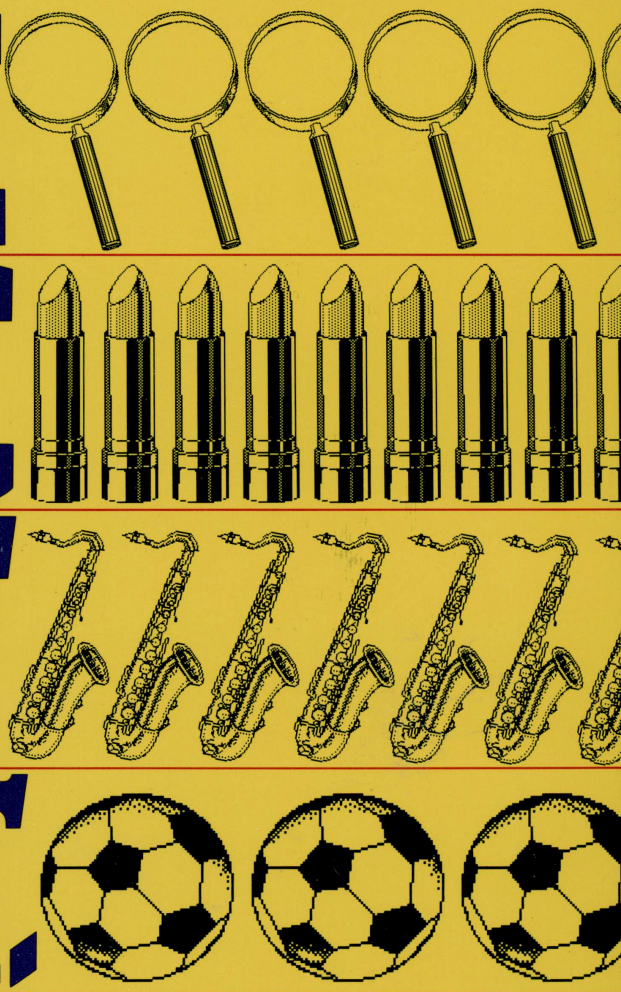
SOFTWARE FOR THE MACINTOSH

THE MAC ART DEPT.



- Makes Anyone a Skilled Graphics Artist with the Help of the Macintosh
- Includes Over 150 Re-usable Graphic Elements
- Extensive Suggestions for Creating Unique and Personalized Designs

BY TOM CHRISTOPHER

Mac Art Dept.

Tom Christopher

Drawings by Tom Christopher and Harry Bates

Computer Software Division/Simon & Schuster, Inc.
New York

I would like to thank Robert Eckhardt for his ideas and contributions to this project.

Published by the Computer Software Division
Simon & Schuster, Inc.

Simon & Schuster Building
Rockefeller Center
1230 Avenue of the Americas
New York, New York 10020

SIMON AND SCHUSTER and colophon are registered trademarks of Simon & Schuster, Inc.

Designed by Publishing Synthesis, Ltd./Kenneth R. Ekkens
Manufactured in the United States of America
Printed and bound by Kingsport Press

10 9 8 7 6 5 4 3 2 1

ISBN: 0-671-54317-2

Contents

Introduction

Mac Art Dept. was created primarily for people with little or no art and design background. The disk contains copyright-free drawings that are yours to use with the Macintosh computer and the MacPaint program. These drawings are raw material for you to adapt and alter to suit your design needs. In this manual, I make suggestions for possible uses of these images in stationery, letterheads, business correspondence, newsletters, announcements, or personal letters. I also show you numerous ways to modify images; every image may be altered at least twenty different ways (which will be discussed in detail later on). Many of the objects on the disk are drawn only as outlines so you can choose whether to silhouette them, reduce or elongate them, drop in a tone or pattern, or use the spray can to create a form. You can integrate the drawings with large, complex designs, combine them with the Mac's various type fonts, and even enhance your pages with border designs. The possibilities for creating personalized, distinctive designs are almost limitless. The powerful features of MacPaint allow you to make a copy of an image for safekeeping and then give you the freedom to improvise and experiment with various techniques on the original.

While there are no right or wrong solutions to design problems, I will try to help you understand why some layouts are more pleasing than others. Some images will look spectacular when altered in a certain way; others will be excellent candidates for the trash. The examples in this manual will also familiarize you with the Mac's functions and with the steps used to create certain effects. But before I get down to the details of using Mac Art Dept., a little background about the Macintosh is in order.

The Macintosh era

The Macintosh introduces a new era of affordable, complete graphics systems. Although MacPaint-type programs have been produced for other computers, the Mac has the distinction of being the first and best computer in its price range. Some will dispute this claim, citing the fact that the Mac does not support color. But while color capabilities in a low-cost computer may have some useful applications, for the kind of graphics most people want to create, color isn't really practical. Most printed matter is designed in black and white, simply because it's faster, easier, and less expensive. Color reproduction from a computer screen is expensive and often ends up looking like a poor-quality color photocopy that's been left on a busy street corner in the rain. Furthermore, combining color graphics and words effectively is difficult.

MacPaint, however, was designed to work beautifully with MacWrite—in black and white. Imagewriter output can be photocopied in mass quantities or used as medium-quality, camera-ready art. Some typesetters will take your MacPaint files disk (or files sent via modem) and typeset your material to produce high-quality photostats ready for the printer. Or you can use a laser printer, if you have access to one, to produce high-quality output. With these last two, nearly foolproof, methods, there are no spec instructions to foul up, no pieces of art to lose. Thus the Mac is a complete graphics work station that combines all the drafting tools, photostat machines, and mechanical boards you need into one small package. The tools at your command are incredible: you never have to buy erasers, ink, pen tips, rubber cement, spray mount, T squares, or French curves, or make runs to the nearest Aqua-lung dealer for airbrush tank refills. The Mac is an instant, well-stocked art supply store that, when used with MacPaint and Mac Art Dept., gives you the freedom to try anything.

Jasper Johns, a pioneer of modern art and one of the most revered and influential artists of our time, described art as taking an object, doing something to it, then doing something to it again. I invite you to do just that, and in the pages that follow I'll give some advice on how best to go about it. After all, you are now the director of your own Mac Art Dept.

Getting Going with Mac Art Dept.

If you have a Mac without the external disk drive, the first thing you may want to do is break down and buy a second drive. Mac Art Dept. does run on a single-drive system, but in order to transfer images to your MacPaint work disk from Mac Art Dept., you will have to resign yourself to constant disk swapping. There's just no way around it. (To those of you who have come to hate even the thought of disk swapping but cannot afford an external disk drive: see *Supermac* by Danny Goodman [New York: Simon & Schuster, Inc., 1985] for advice on efficient disk swapping with a one-drive system, as well as suggestions about how to make a MacPaint work disk and other useful things.)

Getting a drawing from my disk to yours

Now, whether you have one drive or two, for a quick demonstration of how to transfer a drawing, let's start with a clean, new page. From the desktop, simply double-click on the MacPaint icon in your work-disk window, and a new document file will open automatically as the program loads. If you are already in MacPaint, save and close the current picture, then pull down the file menu. Choose New and you're ready to go. Well, sort of.

You are looking at a blank page, which can be quite intimidating, so let's cover it with an image or two from the Mac Art Dept. To pull drawings from Mac Art Dept., first close your empty file. To do this, hit Save or Save As in

the File menu. A dialog box will appear and ask you to name the file. Give it an eloquent name; then click on Save or press Return on the keyboard. Now select Open from the File menu, and another dialog box will appear.

If you have a two-drive system, insert the Mac Art Dept. disk in the external drive, and that disk name should appear in the upper right-hand corner of the dialog box (if not, click the drive button). Next, select the name of the file that contains the drawing you want from the scroll box on the left. (To help you make your choice, the Appendix in this book shows each file, in a slightly reduced size.) Now click on Open in the dialog box.

If you have a single drive, you have to take a few extra steps. Click on the Eject button in the dialog box to eject your MacPaint work disk and insert the Mac Art Dept. disk. Select the name of the file that contains the drawing you want, click on it, and click on Open (you can also simply double-click on the file name).

Now, whether you have one drive or two, when the Mac Art Dept. page appears on the screen, use the lasso or marquee (called the *selection rectangle* in the MacPaint manual) to surround the drawing that interests you. Select Copy from the Edit menu (always Copy, never Cut). Close the file and select Open from the File menu. Single-drive users must now eject the Mac Art Dept. disk using the Eject button in the dialog box and put their MacPaint work disk back in. Those more fortunate folks with external drives will simply click on Drive in the dialog box, which will switch them back to the MacPaint work disk.

Next, whether you're using one or two disk drives, click on the name of your recently titled file, which should appear in the scroll box on the left side of the dialog box. Your clean sheet of paper should now reappear. Before pasting in the drawing you have selected, double-click the grabber to open Show Page. Once in Show Page, use the cursor to move the screen rectangle to the place on the page where you want the image to appear. Once you have the screen positioned correctly, click on OK. Now select Paste from the Edit menu. You have just copied your first Mac Art Dept. drawing.

I will cover how to move more than one image at a time (from a single file, or from several different files) a little later.

Some general advice

Before you start manipulating the image you have copied, here is some general advice that will help you use the Mac Art Dept. more efficiently. The first and most important point to remember: always copy, never cut images from the Mac Art Dept. disk. If you inadvertently use the Cut function, you can undo the damage by answering "No" to the "Save changes before closing?" prompt that will appear when you close the Mac Art Dept. file. For protection, always keep a copy of the Mac Art Dept. disk in a safe place—that way, if you cut and lose an image accidentally, you can replace the image using your backup disk. (Some of the older DOS System Disks cannot copy a completely full disk. If you have a problem, either purchase an updated System Disk or simply copy half of the files onto a second.) All I ask is that all copies of the disk that you make be only for your own use. Giving copies away to friends and acquaintances is illegal—and, for me, may mean that I'll never get that beach house in Malibu.

Remember also that if you are transferring Mac Art Dept. images between files and you want to close one file and open another, you don't have to exit MacPaint. Simply select Close from the File menu or hit the close box on the left end of the title bar. The window and file will disappear, but the menus will remain. You can now open a different file by selecting Open from the File menu. If you have a single-drive system and the file you want is on another disk, you will have to eject the current disk with the Eject button in the resulting dialog box. Owners of two-drive systems simply have to click the drive button in the dialog box to access the disk in the external drive. The new disk name will then appear in the upper-right corner of the dialog box.

Another point to bear in mind while using the program: keep your MacPaint work disk uncluttered so that you don't run out of space. If your disk does become dangerously full (with only 3K to 50K left), you will get an audible warning and see a prompt advising you to delete material or change disks. If you get to this point, it is best not to try to continue working, but to stop and move unneeded files to another disk before doing anything else. This will prevent the program from performing its most drastic measure—locking you out—at a critical moment.

Some MacPaint Fundamentals

Now you are ready to exercise your creative talents—by using MacPaint to modify Mac Art Dept. drawings and make your own designs. Although the MacPaint manual is clear, it is pretty short. Thus, before we get our hands dirty, I'd like to add a few more suggestions that should help you to manipulate the images in this package.

Positioning your drawing on the page

When you enter the Show Page mode, you can move the image and page in several ways. One way is to position the pointer in the dotted rectangle and move the window. The image will stay in the same place on your 8×10 page, but the active window will cover a different area.

You can also position the image on the page by dragging the pointer outside the dotted rectangle. A word of warning, however: if you move any part or all of the image off the screen, you will erase it when you exit Show Page. Should that happen, your only recourse would be to revert to the last version, provided you have already saved the image.

Incidentally, as you work, it is a good idea to periodically double-click the grabber to enter Show Page and simply look at your work as it will appear on the page. It's easy to fall into the habit of designing just for the screen window, which is actually less than a third of the entire working page.

Replicating an image

To replicate an image, first surround it with a blinking marquee or lasso it. Then place the pointer anywhere on the image, hold down the Option key, and drag the new copy to another part of the page. If you want the copy and the original to line up either vertically or horizontally, press both the Shift and Option keys as you drag your copy.

Before working on a particular image, I recommend duplicating it in this way for comparison purposes. You can't be sure how the changes you plan to make will affect the drawing, and although you can always revert to the last version you saved, having to do so will mean that you've lost all your changes since your last save.

To create repeated images for a shadow effect or to use an image as if it were a brush shape, lasso the image (you can use the marquee too, but the included white space of the background usually spoils the effect), hold down both the Command and Option keys this time, place the pointer on the image, and drag it around the page. Vary the speed with which you make a stroke and note the different kinds of effects you can create.

Moving an object on the screen

To move an object on the screen, you can use either the marquee or lasso icon. While both perform the basic function equally well, they operate somewhat differently and each has its own unique capabilities.

The marquee is the more powerful of the two. It allows you to execute the options of stretching, rotating, flipping, tracing edges, and inverting an image. Just remember, though, that as you "rubber band" around an image, the entire contents of the marquee, including the white space around the object, is captured. You can also marquee a full screen if you wish. To do so, simply double-click on the marquee menu box.

Despite the fact that the marquee has access to a greater number of options, the lasso has two significant advantages. One is that it captures only the image in question, with no background, no matter how complex its shape. The other

advantage is that you can use it to turn an image into an overlay (which means the image is transparent, allowing the background to show through), provided you leave an opening of at least one pixel in the image's outline. Since all the drawings in Mac Art Dept. are fully enclosed, to take advantage of this feature you must enter the FatBits mode and knock out an opening. (More on this later.)

Reshaping an object

When an object is enclosed by the marquee, you can reshape it in a variety of ways. Take the image you have on your screen and experiment.

- First, place the pointer on the top or bottom side of an active or blinking marquee (to stretch or shrink an image vertically) or on the left or right side of the marquee (to alter the image horizontally). To stretch or shrink along both axes simultaneously, place the pointer in any corner of the marquee.
- Now press the Command key while slowly moving the cursor. The enclosed image will stretch or shrink, depending on what you do. If you hold down both the Command and Shift keys together and place the pointer in any corner, the image will still stretch or shrink, but only in such a way that it maintains the same proportions as the original.
- To toggle between the new shape and the old one, hit the Command and *z* keys together (these are the keyboard equivalent of Undo).

By the way, don't attempt to use this method to resize type; the results will be disappointing. Some letters become heavy, while others stay the same weight. Replacing the lettering with a different font size is the best solution.

You may also be disappointed by the results when you try to stretch illustrations of living things. While pictures of inanimate objects respond fairly well to this treatment, a "stretched" horse, for example, is likely to become

unrecognizable. Nonetheless, go ahead and experiment; your stretched horse might turn out to be spectacular! Fortunately, you always have the Undo command at your disposal, so you can return your drawing, animate or inanimate, to its original form.

The same principles apply to condensing or shrinking objects. In general, objects tend to appear more "computerized" as you enlarge or reduce them. Remember, too, that enlarging an image will often cause it to look bulkier. Single pixel lines will acquire new pixels in seemingly random patterns, and a design's subtlety can easily be lost. You'll want to keep these guidelines in mind, but don't forget, you're the art director, and the drawings are yours to play with.

Zooming in with FatBits

MacPaint's zoom function is called FatBits. This feature allows you to magnify a pixel (the smallest drawing unit on the screen) to eight times its normal size, making it large enough to work with easily. Zooming in on your work is the best way to clean up and add detail.

To enter FatBits if you are using the pencil, simply position the pencil on the place you want to enlarge, hold down the Command key, and click the mouse. (You can use this same method to get out of FatBits as well.) If you are using any of the other tools, simply double-click the pencil in the tool palette or select FatBits from the Goodies menu. A magnified version of the section you have selected (using the pencil method) or of the last section you worked on (in all other methods) will appear. To help you visualize the results of your FatBits artistry, MacPaint displays a normal-scaled version of the section currently displayed in FatBits in the upper left corner of the screen.

All the tools in the tool palette will work in FatBits, but the tools that are most practical when working at such a magnified scale are the pencil, grabber, eraser, and line. You can scroll an image in FatBits by first selecting and then dragging the grabber, but if you are using the pencil, it is much quicker to press the Option key. Doing so changes the pencil into the grabber for as long as you hold the Option key down.

Filling objects with patterns

The Fill function from the Edit menu (which can only be used with the marquee or the lasso) and the paint can icon let you fill an object or entire screen with a tone or pattern. When using the Fill function or the paint can icon, however, always make sure that you save your image immediately beforehand or, at the very least, have a spare copy of your image next to the first. Do this because, when using either of these two functions, even the most seasoned MacPaint users are capable of a simple mistake that can lead to disaster. What is this mistake? When you click on Fill or the paint can, you may not see the results immediately—both Fill and the paint can sometimes take a few moments to register their results. If you are the impatient type, you may well assume that the first click didn't register, and click again. This is not a problem if you made no mistakes and got the results you were looking for. But woe is you if you didn't. If both clicks did indeed register, the second click undid the Undo function for the first. The result: your original, premistake version is completely gone, and your work is ruined. So be careful with Fill or the paint can—when using them, always wait before assuming that your nimble fingers didn't press the mouse button hard enough.

The most common problem (read: disaster) encountered with Fill or the paint can is having the pattern leak out of the drawing and flood the screen. The cause of this all-too-common event lies in the image you are attempting to fill—somewhere in its outline there is an opening, a missing pixel, that allows the pattern to escape. The drawings in Mac Art Dept. are sealed to prevent this, but if you modify them in any way you should check to be sure that they are resealed. To do this, position the pencil on the picture's outline, hold down the Command key, and click the mouse button to enter FatBits. Use the pencil to fill in any holes, and use the Option key to turn the pencil into the grabber. With the grabber, of course, you can follow the outline all the way around to check for leaks.

Note that in MacPaint, you have two options using the spray can or paintbrush with a pattern. One is straightforward: if you simply hold down the mouse button (without pressing any keys on the keyboard), the new pattern will replace any existing pattern on the screen—by stages, of course, if you are using the spray can. If you hold down

the Command key while you use either the spray can or the paintbrush, however, the new pattern will wash over existing patterns or lines instead of simply replacing them. The Command key thus gives you the option of using a pattern as if it were a transparent overlay.

To completely replace an old pattern with a new one, use the paintbrush (without holding down the Command key) for complex shapes or the marquee and the Fill option (from the Edit menu) for very simple shapes.

Creating your own patterns

When you're using the patterns from the pattern palette, remember that you are not limited to the selection shown. You can alter any pattern or create entirely new ones.

To create a new pattern, simply double-click on the existing pattern that you want to alter. This will bring up an Edit Pattern window showing your selected design both in regular size and in FatBits (in an 8×8 pixel box—the basic unit of every pattern). You edit the pattern simply by clicking pixels on or off with the pointer in the FatBits version; each change is immediately reflected in the regular-size version on the right. A little experimentation will show that even the slightest addition or deletion will significantly change the look of a pattern. Replace the old pattern with the new by clicking on OK when you are done.

If you create patterns that you would like to reuse at other times, make medium-sized rectangles filled with your new patterns (one to a rectangle, of course). Create a document file called Patterns. Follow the usual cut and paste techniques to save your patterns to the new file, using the Scrapbook if you have more than one screenful of patterns to move. (Usually, cut-and-pasted elements are stored in the Clipboard—but it can hold only one piece at a time. The Scrapbook, however, is an accessory that lets you save up to 256 pieces of information concurrently. More about the Scrapbook later.)

To use one of your newly created patterns in the Patterns file, first copy and paste the rectangle containing the desired pattern to a blank portion of the page you are working on. Then position the window so that the pattern rectangle appears on the right side of the screen. Now double-click on an expendable pattern in the patterns

palette on the bottom of the screen to get the Edit Pattern window to appear. If you then click on the new pattern, it will replace the expendable pattern in the Edit Pattern window. Edit the new pattern further, or simply click on OK and it will appear in the pattern palette. When you are finished, don't forget to erase the pattern rectangle. By the way, custom patterns in the pattern palette are stored along with the image when you save. Thus, once you transfer a pattern to a particular file, it will always be available in that file until you replace it with another one.

Using the Grid

With some kinds of work, you may want to establish a grid over the entire screen to help you position images and type correctly. One way to do this is to use the Grid command in the Goodies menu, which creates a marching-step type movement in rather large increments when you are using the line tool, text tool, lasso, marquee, polygons, circles, or rectangles. The major problem with the Grid is that it is invisible, although its effects are plainly seen.

A visible dot pattern can assist you in ways that the Grid cannot, such as in dividing images into thirds for full-screen blowups or creating symmetrical objects or designs. To set up a one-pixel dot grid, simply select the widest-spaced single-pixel dot pattern from the pattern palette and fill the screen. You now have a graph-paper-like grid of reference points on which to draw or paste an image. The dots are eight pixels apart and correspond exactly to the grid points of the Grid option, whether or not the Grid was in effect when you filled the window. The only inconvenience of this visible grid is that when you are done you will have to erase the grid dots by hand.

A final note on using the Grid with patterns: when you use the lasso or marquee to place an area of pattern next to another area of the same pattern, the two patterns probably won't mesh. As I mentioned, stock MacPaint patterns, as well as the patterns you have created, are formed by a repeating mosaic-like block, 8 pixels by 8 pixels. Thus, if you are trying to join one area with another after a Cut and Paste or a move with either the lasso or the marquee, to make the patterns properly match at the seams you have to align the patterned areas both vertically

and horizontally, so that the two individual blocks of pattern are in sync. Trial and error will eventually reveal the correct alignment, but an easier way is to use the Grid function while you position the new area—the Grid automatically aligns patterns correctly.

The Clipboard and the Scrapbook

When you cut or copy an image, MacPaint automatically stores it in what is called the Clipboard. As I mentioned earlier, the Clipboard has room for only one image at a time, so it contains only the very last thing that was cut or copied.

Images will be held in the Clipboard while you change from a file to the Scrapbook or from one file to another or from one program to another (such as from MacPaint to MacWrite), but when the Mac is shut off, whatever is in the Clipboard is lost.

If you want to see what is in the Clipboard and you are in MacPaint (or another application that supports the Clipboard, such as MacWrite), simply select Paste from the Edit menu. A copy of the Clipboard's contents will appear on the screen—and will disappear when Undo is selected. If the desktop is on the screen, then select Show Clipboard from the Edit menu.

I've referred to the Scrapbook several times, so now let's take a look at how it works. You'll find it by pulling down the Apple menu located on the far left side of the top menu bar. Move the arrow down until it highlights the Scrapbook and then release the mouse button. The Scrapbook window will appear, partially covering your work area. Your Scrapbook may be empty (it will say so if it is), or it may have text and/or images stored in it. If it contains more than one item (or page), you can use the mouse to scroll through the pages by using the scroll bar at the bottom of the window, just as in MacWrite, except that scrolling can be done only in whole page increments. The Scrapbook will disappear when you click the box in the upper left corner.

If you are copying more than one item at a time from Mac Art Dept., it is most efficient to use the Scrapbook to hold the images until you are ready to return to your current drawing. To place an image in the Scrapbook, simply

enclose it with the marquee or lasso and select Copy (remember: always Copy) from the Edit menu. It is now in the Clipboard. Without closing the file, select the Scrapbook under the Apple icon. When the Scrapbook window opens, select Paste and the image will be transferred from the Clipboard and appear on the first page of the Scrapbook. To put another image in the Scrapbook, close the Scrapbook window and select something else from your file. Copy it, and then open the Scrapbook again. When the Scrapbook window opens, select Paste. The new image will appear, on a new page of the Scrapbook. Although the previous image is no longer visible, it is still there; the Scrapbook has automatically scrolled everything back a step—a click on the right arrow of the scroll bar will bring the previous image back to view. Thus the latest addition is always the first in the Scrapbook window.

So long as your disk has the storage space, over 250 images can be pasted into the Scrapbook in this way, and they will remain there even after you have turned the Mac off. But accessing a large number of images stored in the Scrapbook can be tedious. Drawings are stored in succession, and to find those stored deep in the interior of the Scrapbook, you must scroll past many others. If you are manipulating many images, you may want to consider setting up a special file for them. Cutting and pasting between files may take longer, but the easy access may well make up for it.

To paste from the Scrapbook to your current file, open the Scrapbook from the Apple menu and scroll through it until the desired image appears on your screen. Select Copy (or Cut if you want to erase the image at the same time) from the Edit menu. Then close the Scrapbook by clicking on the close box. Now select Paste from the Edit menu. The image will appear in your MacPaint window, enclosed in either a lasso or a marquee (depending on how it was pasted into the Scrapbook) so you can move it to the desired spot on the screen.

Erasing your work

Not everything you do in MacPaint will meet your own high standards. Therefore, you will, from time to time, find

it necessary to erase. With MacPaint, you can use several methods.

- The pencil will erase (turn to white) each black pixel that you click on. (Of course, if you click on a white pixel, it will turn it black.) If you hold the mouse button down, rather than just click, it will continue to erase all the black pixels it encounters as it is moved over the screen.
- The eraser from the tool palette will erase larger areas; a double-click on the eraser icon will erase the entire screen.
- The paint can and paintbrush will erase if you choose white for the pattern. If you select white as the pattern and the dotted line as the outline, any of the filled, solid shapes in the tool palette will erase an area of the corresponding shape.
- Enclosing all or part of an image in a marquee or lasso and selecting Clear from the Edit menu will erase the selected area.
- Finally, to erase your last action, click Undo in the Edit menu, or hold down the Command key and hit *z*.

Printing

When you're ready to print out your work you have two options. If you select Print Draft, the print head makes one pass per line. In Print Final mode, the printer makes two passes and deposits more ink on the paper, resulting in smoother-edged, darker, and better quality results. Draft Print is a little cruder; the "jaggies" or stair-step effect on diagonals is more pronounced.

Print Final obviously takes twice as long as Print Draft, and for my money, the results usually don't warrant the extra time. So long as your printer ribbon is fresh, the black areas in a picture printed in Draft mode are quite acceptable. And depending on the quality of the paper, if you do use Print Final mode, there may be a caved-in look to the page after the image has been hammered in twice. The better the paper, the more burnished (and the less caved-in) the image will appear.

The Imagewriter will handle any kind of paper. If you want to hand color the design, you should use a good

quality bond or high rag content paper. The printer will run paper without sprocket holes along the sides as long as you feed it into the roller carefully, one sheet at a time.

To print an entire page, simply select Print Draft or Print Final from the Edit menu (your printer must be turned on, of course). In a few moments—or twice that long for Print Final—you'll have your copy. To print only the contents of the active window, hold down the Command and Shift keys while you press the number 4. To print the entire screen, including the menus, first activate the Caps Lock, then continue as if you were printing the active window.

If you want to print more than one page at a time, you can load a series of documents into the printer by selecting the files to be printed from the desktop (hold down the Shift key and click over the desired files one by one). Still from the desktop, select Print from the Files menu, and your documents will be printed (in Final mode) in the order in which you chose them.

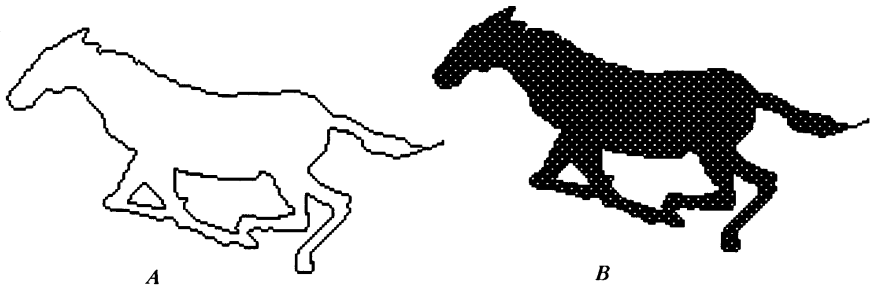
Manipulating Mac Art Dept. Images

Now let's look at some Mac Art Dept. images that I have modified and added to in various ways. The accompanying summaries describe how certain effects were achieved and, in some instances, explain why a particular approach was taken. Here as well as in later sections, I have also included some design failures so that you can learn from my mistakes.

One final note before we begin. The basic tasks we'll be performing from now on are duplicating images, moving them around the screen, filling them with a tone or pattern, blowing them up, shrinking them, and a few other maneuvers. I recommend that you become familiar with using the keyboard to perform some of these functions; you'll find this method much faster than using the mouse to pull down menus.

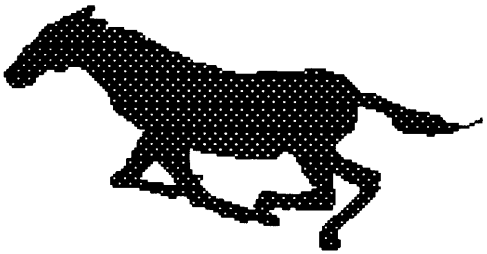
The horse in Figure 1a was copied directly from the Animals file. To create a shadow underneath it, I used the lasso to make a duplicate horse and then filled the copy with a dark tone using the paint can (Figure 1b). How-

Figure 1



A *B*

Figure 1 (continued)



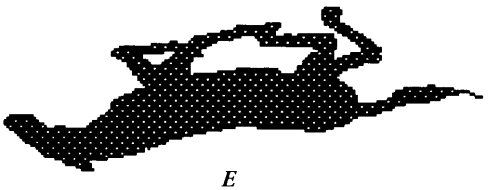
C

D

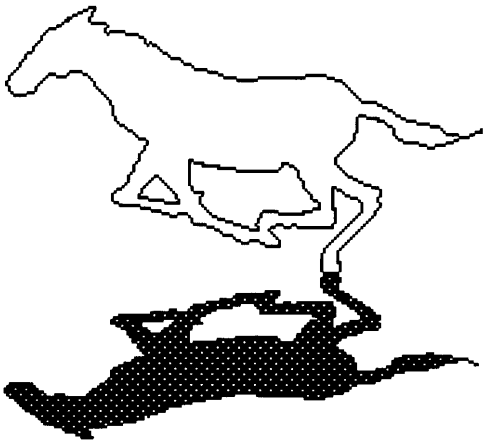
ever, when I marqueed the shape and compressed it for the shadow (Figure 1c), the pattern became distorted and uneven, and began to look like a bad necktie design. To avoid such problems, try to perform all your manipulations on an unfilled figure first, and then fill it to get a clean pattern.

So let's try again. To get to the image in Figure 1d, the original horse is marqueed, flipped vertically (using the command from the Edit menu), and compressed (using the marquee while holding down the Command key). Only then was the outline filled using the paint can (yielding Figure 1e)—note the intact pattern this time. The completed shadow was then lassoed (so that there would be no white border) and joined to the horse outline (Figure 1f). Note that even though the images are flat, the use of the shadow gives the impression that the horse is a three-dimensional object.

Figure 1 (continued)



E



The jukebox used in Figure 2 was copied from the Music file. The two versions here are simple examples of using the paint can to apply patterns to parts of a drawing. Once you have picked a pattern from the patterns palette, position the paint can icon so that the paint drip is in the area to be filled, and click once. If you don't like the result, simply hit Command-Z to undo the damage, and try something else.

Figure 2

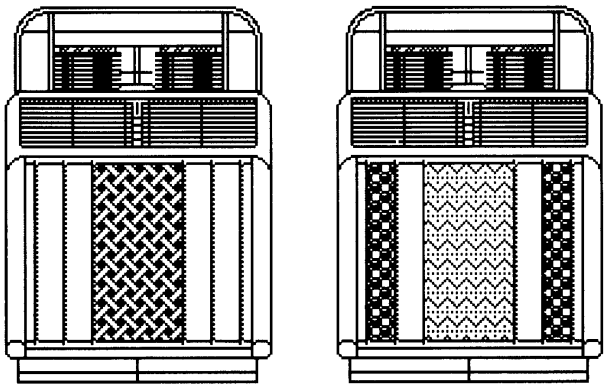
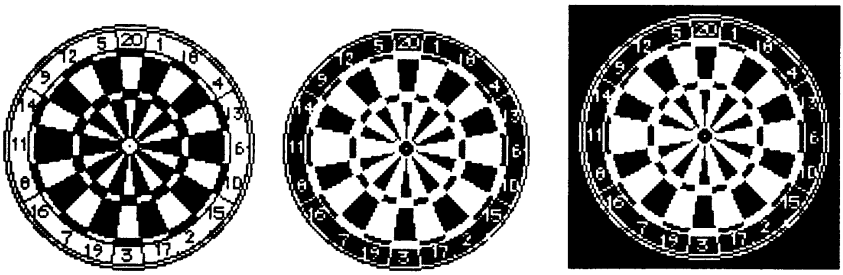


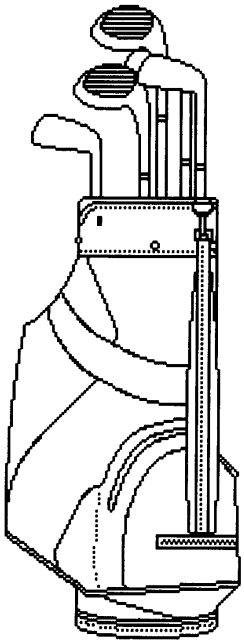
Figure 3



A *B* *C*

The dart boards in Figure 3 show two types of negative images of an object. Figure 3a is the image straight out of the Sports file. In Figure 3b the image was lassoed and inverted; Figure 3c is the image after it was marqueed and inverted. Note that the lasso works only on the object itself, while the marquee encompasses the surrounding area as well.

Figure 4



The golf clubs and bag in Figure 4 are the result of combining several pieces into one drawing. Separate images of the clubs and the bag were copied from the Sports file. The top parts of the clubs were lassoed and duplicated (by holding down the Option key as the image was dragged) and then placed "in" the bag by moving them (still in the lasso) into position. Since the bag is a contained, outlined shape, it could, of course, have been lassoed and moved over a cluster of unsevered clubs instead.

Figure 5 illustrates how to use a single Mac Art Dept. image that is meant to be cut apart and used according to your taste or needs. After copying the wristwatch from the Objects file (Figure 5a), I made a copy and set it to one side. I decided that I wanted a watch like the bottom half of the drawing, so I carefully positioned a marquee around the upper half of the watch and pulled the one half away from the other (Figure 5b). By clicking on Clear in the Edit menu, th unlucky upper half in the marquee was made to disappear. At this stage the eraser was used to take out the remaining hand of the watch. The lower half was then marqueed, duplicated, and flipped vertically (Figure 5c), and then the two halves were joined. Hands were lassoed from the original watch and placed in the new model for the finishing touch (Figure 5d).

Figure 5

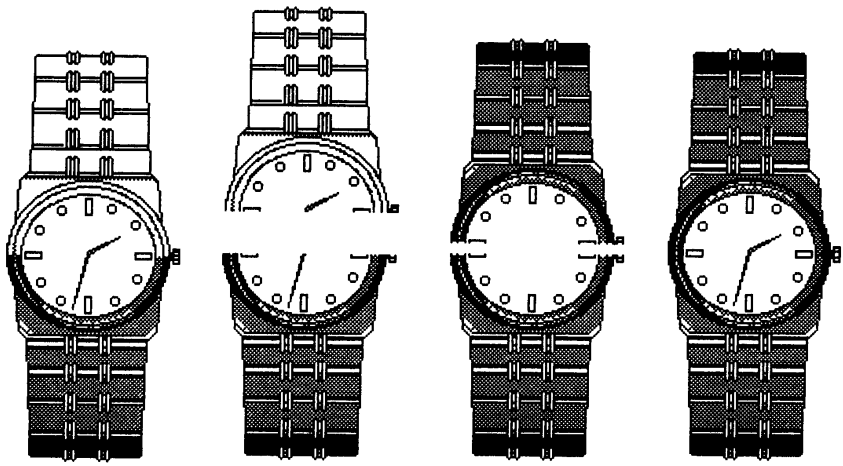
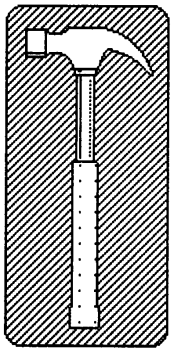
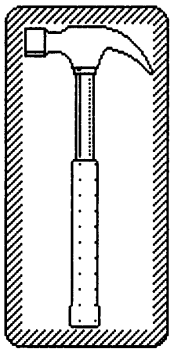


Figure 6



A



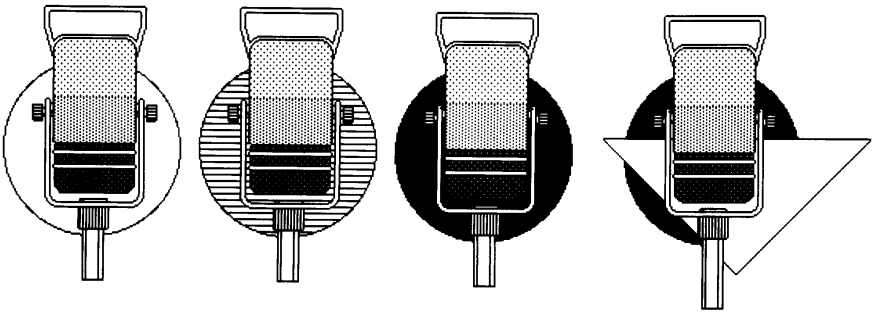
B

Figure 6 shows the difference between using the lasso and the marquee to overlap an object. Figure 6a shows a lassoed image over a tone background. As long as the image is completely sealed, which it is here, the lasso will hold onto the form and the background will show everywhere else. In Figure 6b the hammer was marqueed and moved over the same pattern. As you can see, a white rectangle came with it and blocked out a good part of the background. In fact, one of the easiest ways to create an original graphic design using Mac Art Dept. is to overlap a drawing from one of the files and a simple geometric shape. For example, in all the illustrations in Figures 7, 8, and 9, the microphone was merely lassoed and dragged on top of a simple (sometimes empty, sometimes filled) shape.

In Figure 7a, I drafted a circle with the thinnest line width, using the hollow circle tool from the tool palette while holding down the Shift key (to yield a perfect circle—you will get a perfect square using the same method with the rectangle tools). The microphone was then lassoed and moved onto the circle. In Figures 7b and 7c, I used the paint can to drop patterns into the circle before moving the microphone. In Figure 7d I drafted the triangle using the hollow polygon tool, placed it on top of the circle, and then positioned the microphone on top of the two shapes.

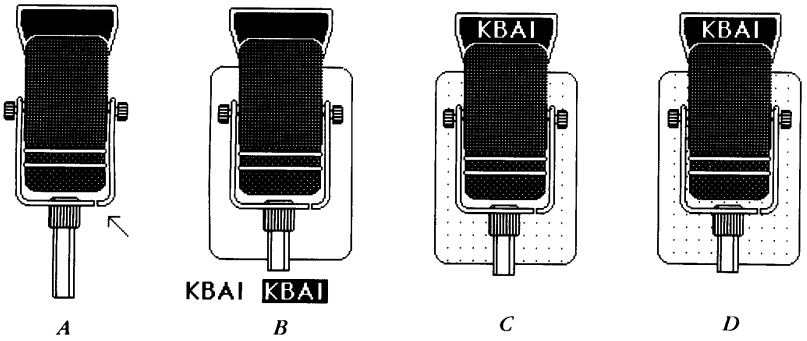
Notice that the space between the microphone and its bracket in Figures 7b and 7c is filled with the background pattern. Had I simply copied and lassoed the microphone as it is drawn in the Music file, this area would have remained white (as it appears in Figure 7a). The secret for

Figure 7



A *B* *C* *D*

Figure 8



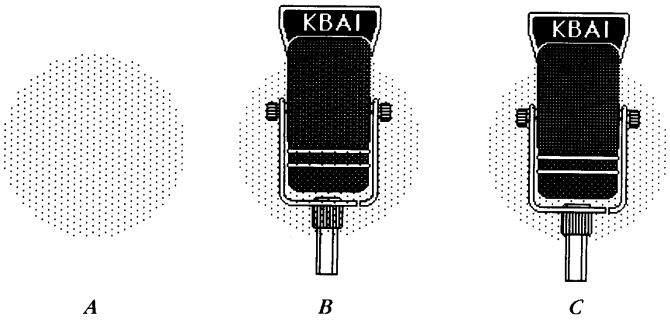
A *B* *C* *D*

getting a background pattern into such an enclosed space is to open a channel to the contained area before you lasso the object. Let's look at a couple of examples to see how this works.

To create the illustration in Figure 8d, I first did some work on the microphone itself. By carefully erasing the pattern in the top part of the microphone (using FatBits to get into the rounded corners) and then filling the area with a dark cross hatching, I made the head of the microphone a darker shade. Next, I filled the top panel with black and then opened a small channel through the microphone bracket (Figure 8a) so that patterns could flow into this area later. I made a large, hollow rectangle with rounded corners using the appropriate tool from the tool palette, then lassoed the microphone and placed it on top. I typed out the station call letters in 12-point, bold Geneva, marqueed them with as small a rectangle as possible, and reversed them by selecting Invert from the Edit menu (Figure 8b). The marquee with its letters was then dragged over the black panel.

In Figure 8c a pattern was dropped into the rectangle behind the mike. Even though a channel was opened to the central yoke area, the dots in the pattern I chose are so far apart that none of them appeared in this area. Although the result is technically correct, it looks like a mistake. In such cases you have two options (whichever one you choose, hit Undo to get rid of the pattern fill before you proceed): select another pattern, or move the entire image a little and try the same pattern once again. Eventually it will work (see Figure 8d).

Figure 9



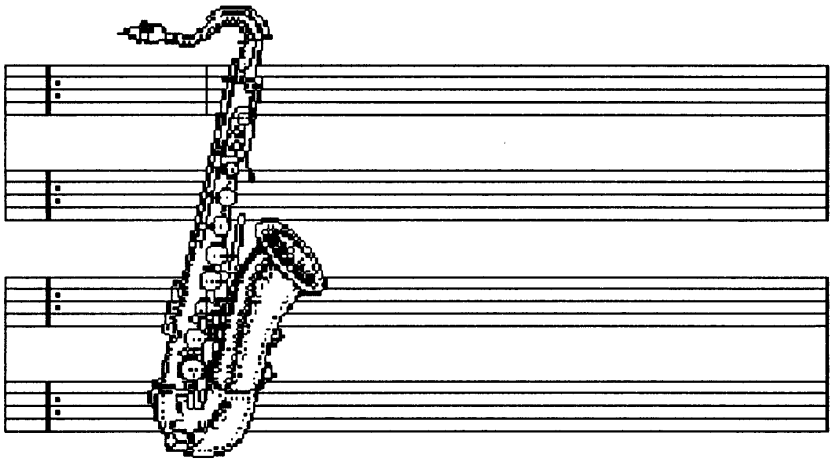
Not all patterns have to be outlined to give the impression of a geometric shape. Figure 9c began with a borderless, filled circle created by using the filled circle tool combined with the dotted-line border from the border palette (Figure 9a). The circle was lassoed and placed over the microphone in Figure 9b, and the microphone was lassoed and placed over the circle in Figure 9c. Note the different results—I think Figure 9c looks better, but you may feel otherwise.

By the way, whenever you are doing work that has definable stages, such as some of the microphone work I did above, it's a good idea to save at the end of each stage. The Undo command will reverse your last command, but if your last major effort has been saved, you can restore it after a series of unsuccessful commands by choosing Revert from the File menu.

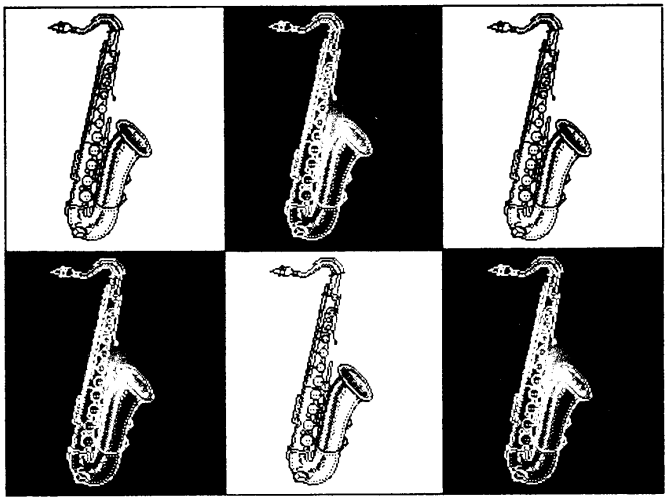
The designs in Figures 10a and 10b are built around the saxophone, which I pulled directly from the Music file. The music staff lines in Figure 10a were copied from the same file and stretched lengthwise (by holding down both the Shift and Command keys while the marquee was pulled from the right end). The saxophone was proportionately enlarged (using the same technique, except that the marquee is pulled from a corner) on a different part of the page, away from the staff lines, then lassoed and temporarily cut from the page. Finally, I scrolled up to the staff lines again and pasted in the enlarged sax.

To make the checkerboard pattern shown in Figure 10b, I first enclosed the sax with the hollow rectangle, then lassoed the box, copied it, and used the Invert function from the Edit menu to create the negative image with the

Figure 10



A

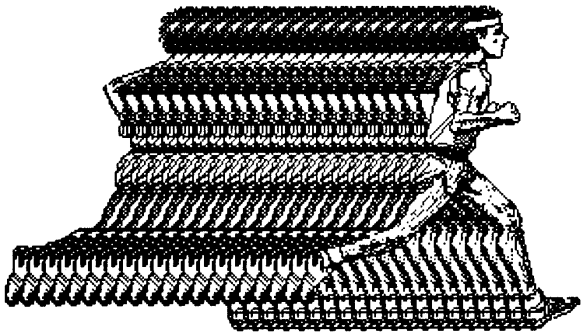


B

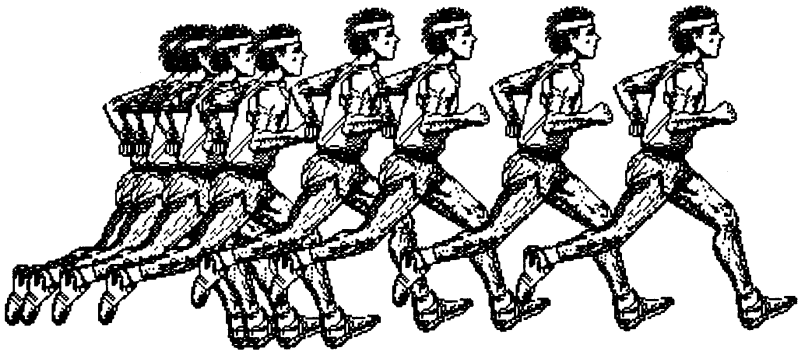
copy. I then duplicated both images several times. With a little juggling, I arranged the boxes as shown. By the way, when you use Invert in this way, it is important to check to make sure your lines are true to your original box, because creating a negative image causes the black outline to disappear. You thus lose a pixel or two when you convert from black on white to white on black, and the checkerboard won't line up right if you aren't careful.

The runner in Figure 11 illustrates the use of an image as if it were a paintbrush. He was cut from the Sports file

Figure 11



A

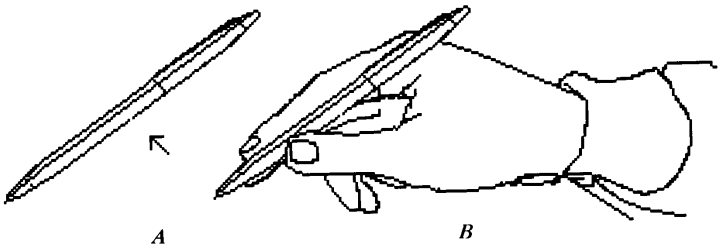


B

and pasted onto an empty page. To produce Figure 11a, the dotted line was selected from the border palette at the lower left corner of the MacPaint screen. The image was lassoed and the mouse was then dragged from left to right while the Command and Option keys were held down. Notice that the copies of the runners are very close together. In Figure 11b the mouse was dragged at about the same speed, but here the fattest line width was selected from the border palette. These are the extremes; the line widths in between will give varying degrees of closeness.

Hands, from the Hands & Signs file, can be combined with other images to a wide variety of ends. The pen in Figure 12, for example, was lassoed and copied from the Desk file. A one-pixel break in the outline of the pen was

Figure 12

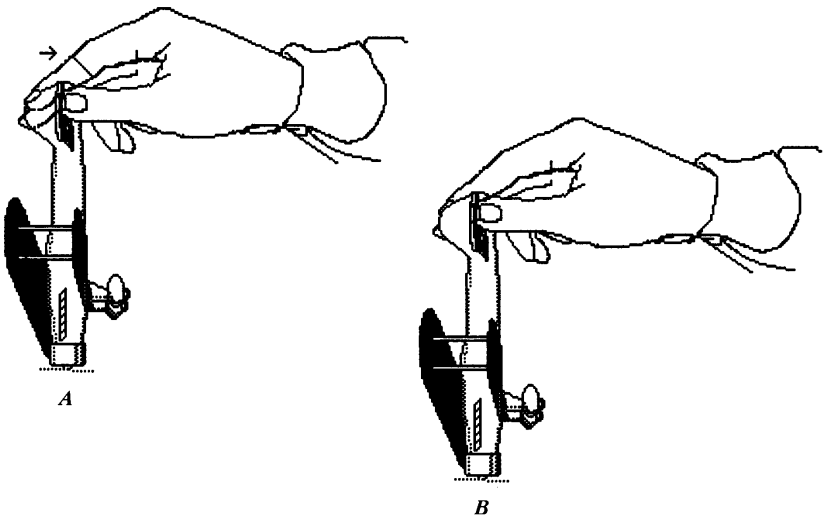


A *B*

made to allow the thumb of the hand to overlap (Figure 12a). The pen was then moved into place using the lasso, and the image cleaned up in FatBits (Figure 12b).

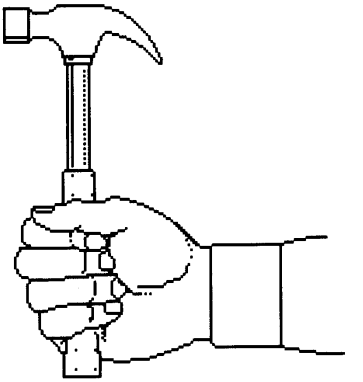
The airplane in Figure 13 was copied from the Travel file. Once pasted on a new page, it was flipped horizontally and rotated in a marquee (using the commands from the Edit menu), and the sign hanging off the back was erased. The same hand as in Figure 12 was copied to this page, and openings were made in the tips of the two fingers so that the tail of the plane would overlap the hand. Since the thumb overlaps the tail of the plane, it had to be solid, so a line was drawn at the arrow in Figure 13a to seal it off. The hand was lassoed, placed over the plane, and the whole thing finally cleaned up in FatBits (Figure13b).

Figure 13



A *B*

Figure 14



The hammer in Figure 14 was taken from the Tools file and the hand was lassoed directly on top of it. In FatBits, I used the pencil to redraw the hammer's handle where the lower side of the hand had cut it off.

The drawing of a waiter's hand holding a tray (Figure 15) is composed of a hand from the Hands & Signs file (note that this hand could also be rotated to a catching or stopping position) and a circle created with the circle tool. To make the oval form appear three-dimensional, the edge closest to the viewer was lassoed, copied (using the Option key), and the copy placed just below the original circle. A couple of pixels were added in FatBits to the right and left edges and the whole tray was then lassoed onto the hand. Now the rest is up to you. Any object from Mac Art Dept. could be lassoed onto the tray.

Figure 15

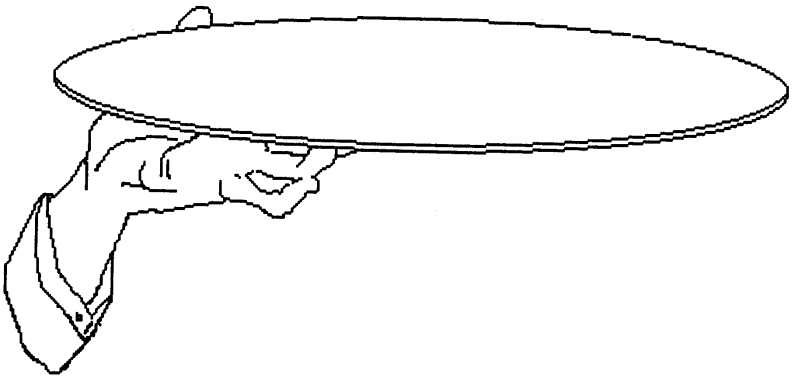
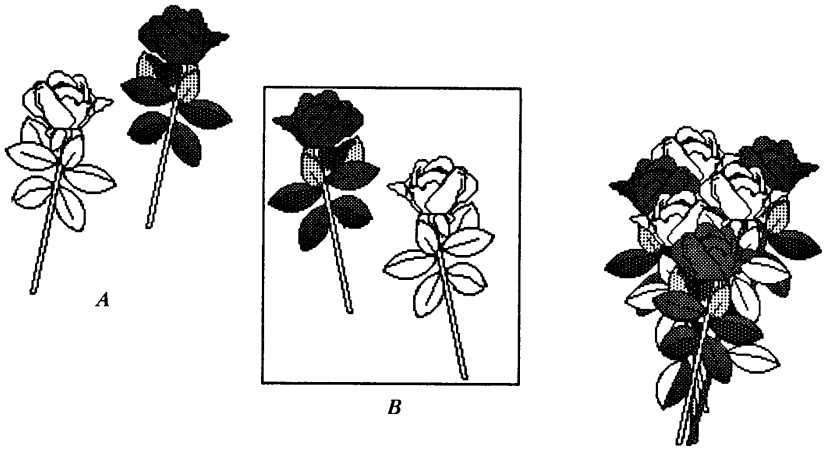


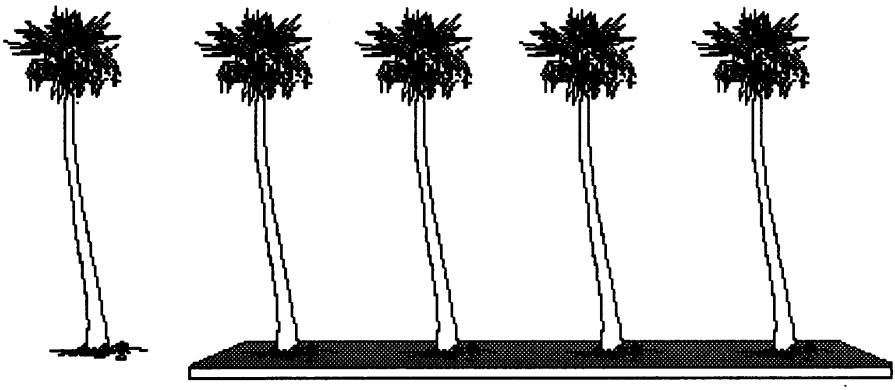
Figure 16



In Figures 16, 17, and 18, I built various groupings of plants and trees out of drawings from the Plants file. The two roses (Figure 16a) were copied from the file, then duplicated, and the duplicate flipped horizontally (Figure 16b). All four versions of the rose were then lassoed and positioned together to create the bouquet in Figure 16c. This bouquet could be combined with other Mac Art Dept. images by placing it in a grasping hand, a flower pot, or the barrel of a gun, to name a few possibilities.

The row of palm trees in Figure 17b was composed by lassoing the single palm from the Plants file (Figure 17a)

Figure 17



and making a few copies. To space the trees evenly, the Grid function from the Goodies menu was used. The sidewalk beneath the trees was built by using the line tool to create the shape and filling the center area with a gray tone, leaving the curb white.

The bare tree and the little squiggles in the box in Figure 18a were taken directly from the Plants file. Individual squiggles were lassoed and copied repeatedly onto the defoliated branches of the tree to produce the pine tree on the right. Once the tree was in good shape, it was marqueed, copied numerous times, and several of the copies were horizontally flipped. Finally individual trees were lassoed and combined to make a forest (Figure 18b).

Figure 18

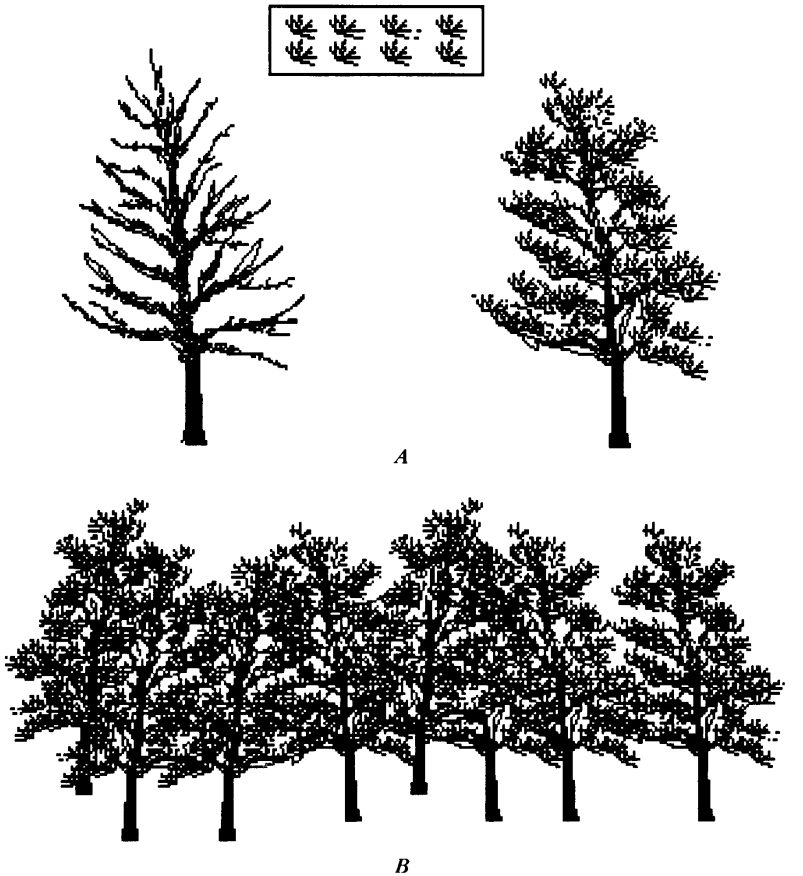
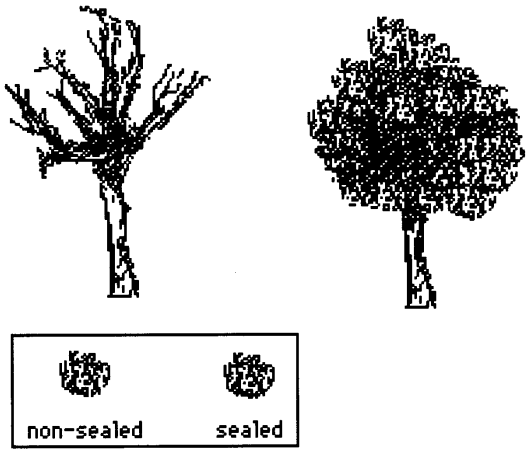


Figure 19



The defoliated deciduous tree in Figure 19 was covered with one of the leaf forms from the box below it (both of which were copied from the Plants file). The two leaf patterns are different: the sealed one will carry with it a white highlight when lassoed (and will not allow the branches to show through either), while the non-sealed one will add density to the tree when it is lassoed and copied. The fully leafed tree to the right in the figure was made using the non-sealed leaf pattern. It's a good idea when working with trees, by the way, to either add or remove pixels from time to time from the leaf pattern you are using in order to avoid too homogeneous a look.

The Plants file also contains a complete oak tree, a small potted shrub, and a boxed leaf pattern. The pattern in the box can be lassoed and used to make different kinds of potted (or natural) shrubs or used as an alternate leaf pattern with the defoliated trees.

Figure 20

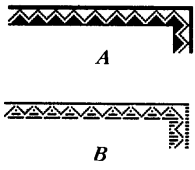


Figure 20 illustrates some simple things you can do with stock borders from the Borders file. The corner shown in Figure 20a is taken straight from the file (and is, by the way, all you need to build a complete border around a page—as you will see later on, a little creative copying and rotating will yield all the necessary parts). Figure 20b is the same border with a different pattern replacing the black of the design, using the paint can and a simple line pattern. Any border can be given an entirely different look this way.

Figure 20 (continued)

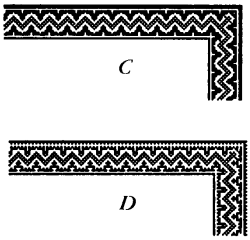


Figure 20c is another stock border, and 20d is the same border with the solid black areas replaced with a different (more or less gray tone) pattern. Changes of this sort tend to subdue a bold border pattern like this one. It may take a few tries with different replacement patterns before you find the right look for a specific border. But if you don't like your first attempt, just hit Undo and try another.

Replacing the white part of a border pattern is just as useful, although a bit more difficult to accomplish. For example, Figure 21a is a stock border, and Figures 21b and 21c are the same border with patterns from the pattern palette dropped into the white areas. To do this, you have to either seal off the ends of the border to prevent filling the entire page, or build the complete border and then fill in the now completely contained areas. The paint can is used to fill in in both cases.

Figure 21

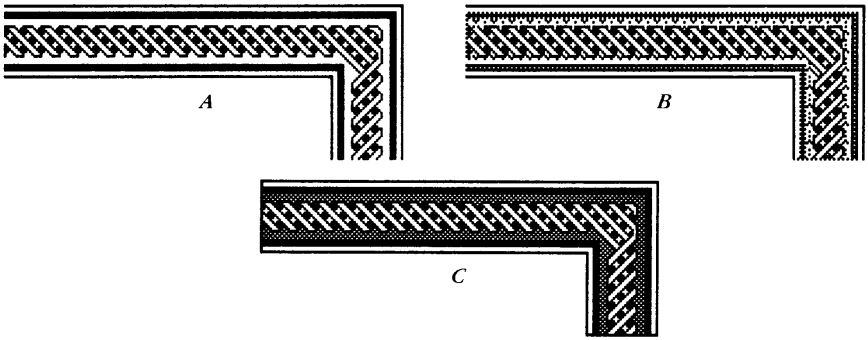
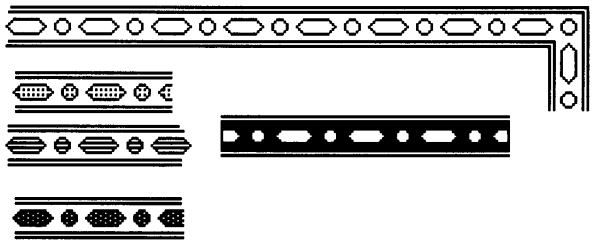


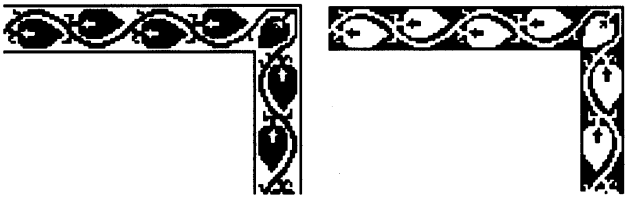
Figure 22 shows several more examples of filled in white areas (the original border is the one on top); in this case, the white areas in three of the altered borders were

Figure 22



already contained, while the white area in the one to the right was not, and had to be sealed before being filled. Another straightforward way to alter an existing border is to lasso and invert it, as in Figure 23.

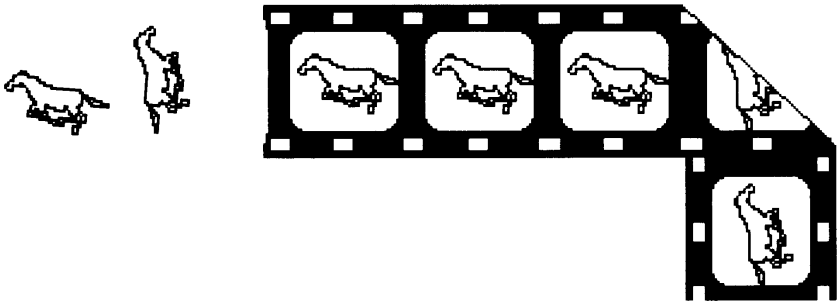
Figure 23



So far, we have just looked at border corners. How do you make a complete border from a corner? Figure 24 shows all the parts you need to manufacture a complete border and the finished product. In this case, the Borders file provides only one corner and an edge. (In many cases only a corner is provided; if so, simply marquee and copy the long side of the corner to make a separate edge piece.) To make the other three corners, take the supplied corner and make a copy with the marquee. With this still-marqueed copy, click on Rotate from the Edit menu to make the second corner. With the marquee still active, make a copy of the new corner and rotate that for the third corner. Now make a copy of the third corner (still in its marquee) and rotate that one, too. You now have four different corners (Figure 24). The connecting edges for between the corners have to be created in the same way from the one supplied in the Borders file. To make the edges long enough, stretch them using the marquee together with the Command and Shift keys. Finally, place all the parts in their proper places with the lasso—to help you make seamless connections, you may find it useful to make your moves with the Grid function on.

Figure 24

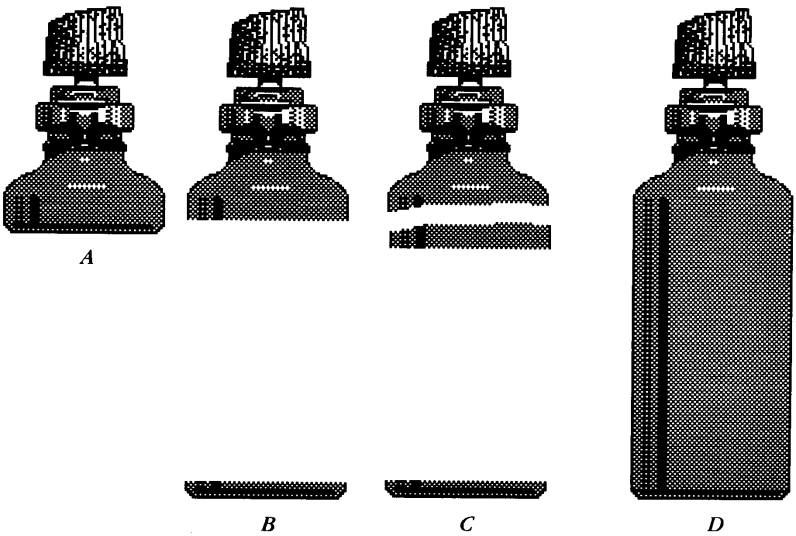
Figure 25



The filmstrip border in Figure 25 can be manipulated in the same way as all the other borders, but it also has the advantage of being able to carry within its individual frames either many different images or a repeated one. Just copy a drawing and either reduce it to fit the frame or enlarge the film window to fit the image. Here the horse drawing has been reduced and then rotated to fit into the vertical windows. The image was then lassoed and copied over into the frames. Once the corner has been completed, as shown here, then the whole border can be manufactured as in the previous example.

The spray can and rendered perfume canister in Figures 26 and 27 appear in the Tools file as squashed images in

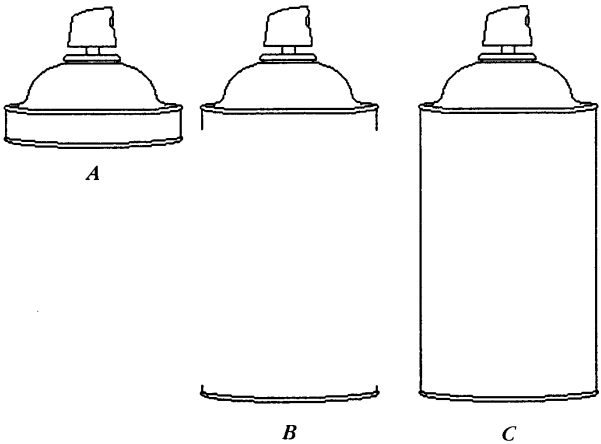
Figure 26



order to save space. The trick to bringing them back to normal is to pull them apart. Figure 26a shows the canister as it appears in the Tools file. In Figure 26b, the bottom section has been marqueed (for a clean break) and moved down on the page. (Press the Shift key as you do so to keep the parts aligned properly.) A section of the top part has been lassoed and moved down in Figure 26c. This lassoed middle section is now repeatedly copied and dragged to make the container body. Just hold down the Shift and Option keys while dragging the mouse, repeatedly releasing the mouse button and then pressing it again to drag some more. Make sure the dots in the pattern stay in register and that there are no missing sections. The final version should look like Figure 26d.

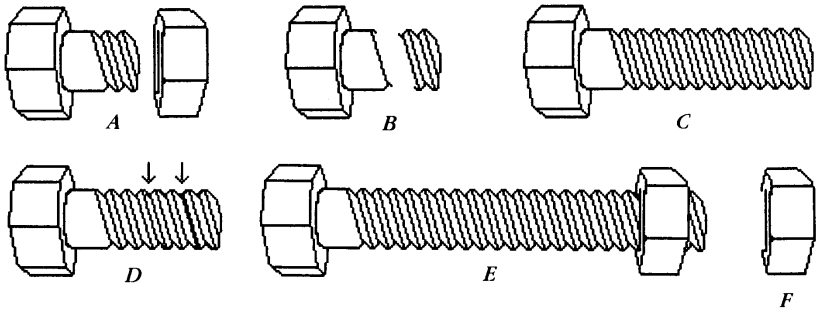
The same principles apply to the paint can in Figure 27. The image as it appears in the Tools file is shown in Figure 27a. The lower section has been marqueed and moved down in Figure 27b. This time, however, the line tool was used to connect the base with the top since this image is not filled with a pattern (Figure 27c).

Figure 27



The nut and bolt in Figure 28a are from the Tools file. The bolt, of course, needs a little more length. Thus, the thread pattern has been lassoed away from the head in Figure 28b, then duplicated and dragged repeatedly using the lasso with the Shift and Option keys (Figure 28c). (Figure 28d shows what you have to avoid when doing this: it is important to make sure everything is in perfect

Figure 28

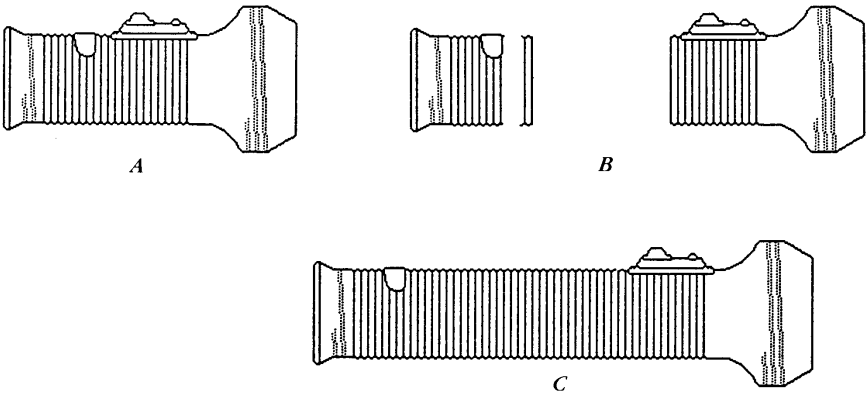


register, whether you are repeating images for a wallpaper-type look, constructing borders, or extending an object. The threads have not lined up correctly in Figure 28d, and heavy lines have formed where they should not have.) Finally, the nut was lassoed into place (Figure 28e) after the far side of it was removed with the eraser (Figure 28f).

The fat little flashlight in Figure 29a (from the Tools file) is also intended to be lengthened. Figure 29b illustrates the section of the handle that should be lassoed and repeatedly copied to build a normal-looking flashlight (Figure 29c). The pencil and the piece of paper held by the paper clip in the Desk file are both meant to be enlarged as well, the latter in order to hold messages.

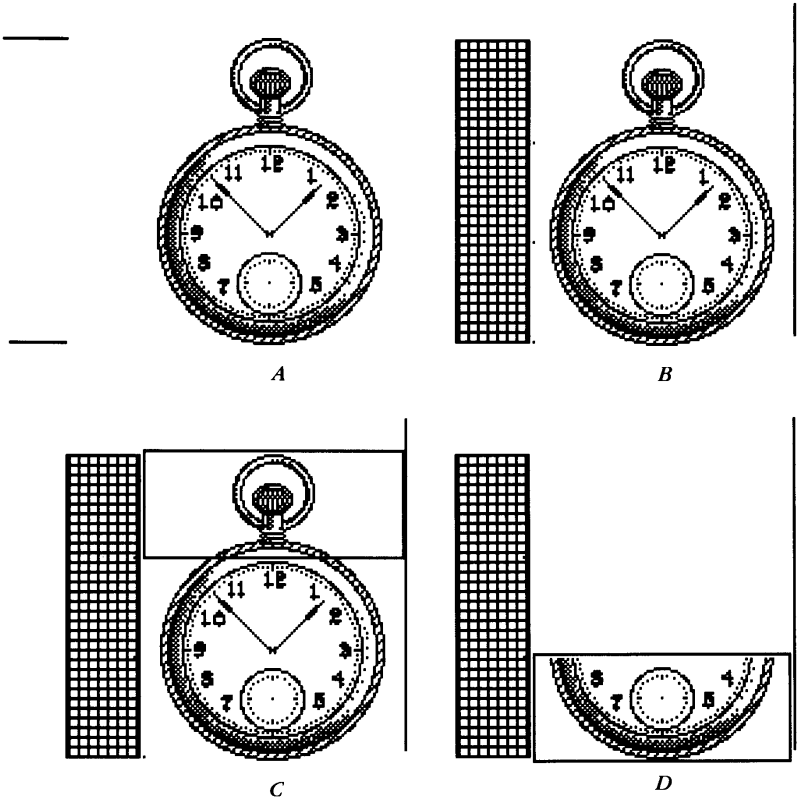
Figures 30, 31, and 32 illustrate the method I use to turn a small image into a full-page illustration. I copied the watch from the Objects file and then used the line tool to

Figure 29



mark the distance from top to bottom. I did this by drawing straight lines (using the Shift key) out from the watch, removing them with Undo, and, with the crosshairs still in the same position, drawing a new, shorter line only partway back toward the watch (Figure 30a). I then carefully fitted a hollow rectangle between the lines and filled it with the grid pattern (Figure 30b). Small tic marks were placed at approximate thirds along the grid, the locations determined merely by counting squares. The bar on the right-hand side was inserted as a reference line.

Figure 30



In Figure 30c, the top section has been marqueed (carefully using all the markings as guidelines). It was then cut and pasted into the Scrapbook. This procedure was repeated for the middle section. The last section was marqueed and cut (Figure 30d), but only held in the Clip-

board and not pasted into the Scrapbook. Then the graphs and other registering marks were erased and the active window placed at the bottom of the page. (During the following steps, it is useful, although not crucial, to keep the window centered on the page.)

I double-clicked the marquee icon to surround the entire window and pasted the bottom portion of the watch from the Clipboard onto the marquee. By pasting in this way, the image is automatically enlarged to the size of the window (Figure 31). Next, using Show Page, the window was repositioned directly above the bottom section of the watch, and the middle section was pasted into another full-window marquee. Finally, the last and top portion of the image was pasted into place. The seams were then fine-tuned in FatBits mode, pixel by pixel (Figure 32). This method can be used to blow up any image to a full page. It is not perfect, but if you are careful, it does a pretty fair job. The closer your marquees are to the proportions of the screen, the less distortion will occur.

Figure 31

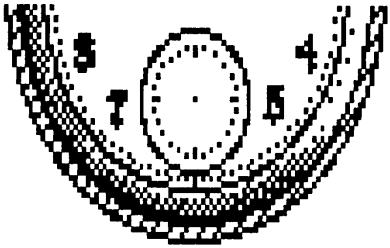
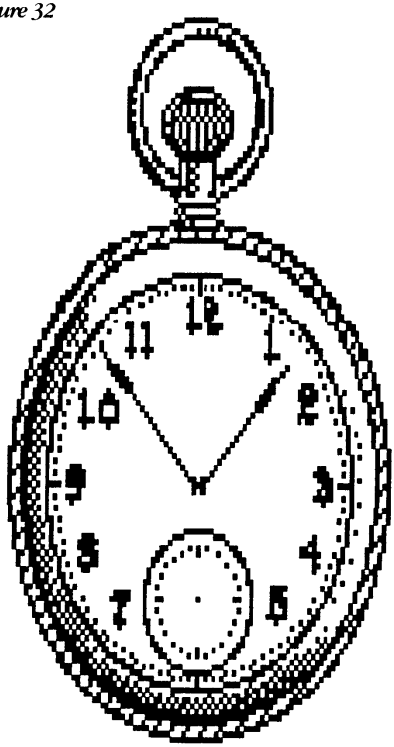


Figure 32



In this example, the numbers on the watch could have been replaced by large-point numerals and the edges of the watch cleaned up a bit, but the computerized look of the whole piece would make the numerals stick out like a sore thumb. Besides, the way it is now creates a nice contrast between an old-fashioned object and a new art form.

To illustrate how all of the many techniques we have seen affect a single image, I have taken a picture of an ink bottle and altered it in all sorts of ways in Figures 33 and 34. Figure 33a is the image as it looks directly from the Desk file. Figure 33b is a proportional enlargement: the image was marqueed, and with the pointer in a corner of the marquee and the Shift and Command keys held down, the mouse was dragged diagonally away from the center of the rectangle. In Figure 33c, the ink bottle was made proportionally smaller using the same technique, except that the mouse was dragged inward, not outward. Figure 33d is a proportional enlargement of the previously reduced image; the result is a more computerized or graphic image. The form becomes simpler and the crudeness of the pixel resolution creates an interesting effect.

Figure 33e is a horizontal stretch enlargement, again using the same technique as above, except that the pointer was placed on a side, not a corner. Figure 33f was marqueed and stretched vertically. Figure 33g is a negative image made by marqueeing the ink bottle and selecting Invert from the Edit menu. Figure 33h shows the image after being lassoed and inverted. Most of the image is lost because the original is almost entirely black. As you can

Figure 33

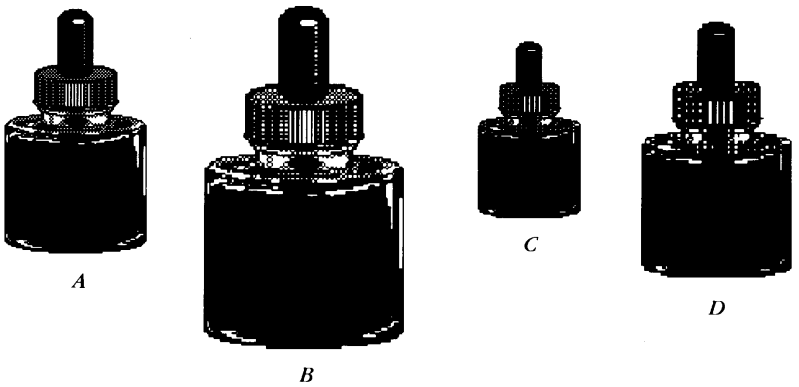


Figure 33 (continued)

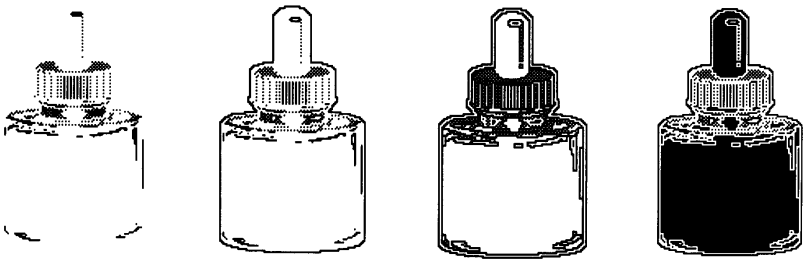
E *F* *G*

see from this example, lassoing works most effectively when there is a balance between black and white in the drawing.

The image in Figure 33i is the result of using Trace Edges from the Edit menu on the original drawing (the ink bottle must be in a marquee in order to do this). Figure 33j has been hit twice by Trace Edges, so the outline effect is more evident. Figure 33k is a further alteration of 33j, which was lassoed and then inverted to achieve this effect.

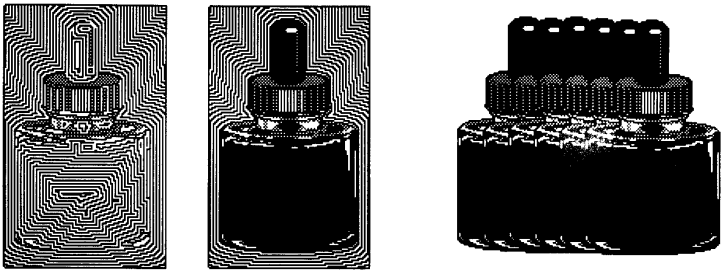
The Trace Edges function has been used repeatedly on the ink bottle until it filled the entire marquee in Figure 34a, and Figure 34b shows the original ink bottle pasted back down in the center of the previous image. In Figure 34c, the ink bottle was lassoed and used as if it were a brush by holding down the Option and Command keys

Figure 33 (continued)



H *I* *J* *K*

Figure 34

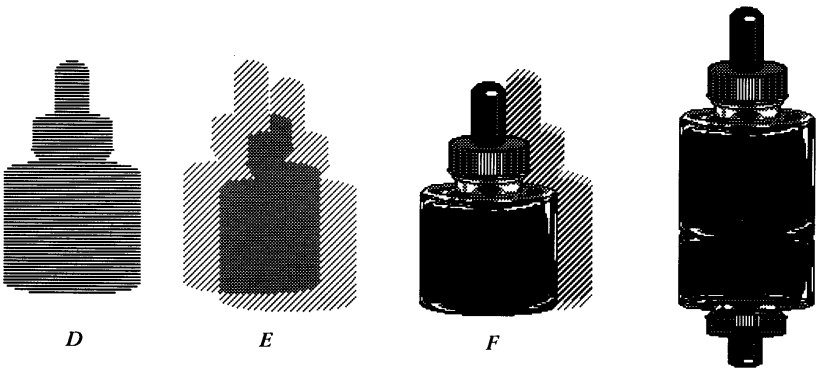


A *B* *C*

while the mouse was dragged. The shape in Figure 34d was made by lassoing the original ink bottle and selecting Fill from the Edit menu after selecting a simple, striped pattern. (If you try this on a marqueed shape, the entire rectangle will fill with the selected pattern.) Of course, any pattern from the pattern palette can be used by clicking over it before you invoke the command. A diagonal fill pattern was chosen for Figure 34e, duplicated with the lasso, then dragged over the original for an overlay effect. Figure 34f was created in much the same manner; two shadows were overlayed slightly and the original ink bottle was then dropped in slightly off-center. This technique can be used to create a shadowlike effect for many kinds of illustrations.

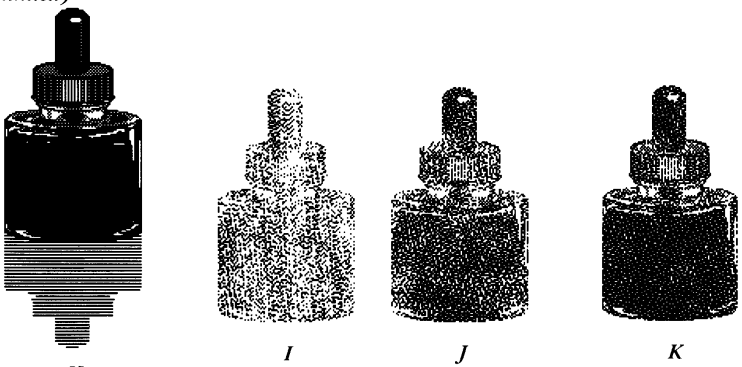
My intention for Figures 34g and 34h was to show a

Figure 34 (continued)



D *E* *F* *G*

Figure 34 (continued)



H *I* *J* *K*

reflective surface with the ink bottle resting upon it. The easiest way to do this is to make a copy with the marquee and flip the copy vertically. Then squash the upside-down image. The final step is to lasso the original and position it over the reflection (Figure 34g). Figure 34h is the same basic idea, except that the reflection was lassoed and filled with a simple pattern from the pattern palette before the unaltered image was moved over top. Figures 34i, j, and k have been ghosted by using white in the spray can. This effect leaves more detail within the image than the pattern-fill technique. Some images, when ghosted, can resemble coquille or charcoal drawings.

Combining Images and Type

There are no fixed rules for using type in design. Some layouts, however, are more visually appealing than others. For example, if you're using a silhouette or a visually heavy image, a lighter typeface will complement it well. Conversely, a light image can be offset nicely by bolder type. Light type with an outline or light object can be subtle, but the combination often results in a washed-out appearance. On the other hand, oversized typography combined with a dark object will dominate the page, perhaps overpowering your overall design.

Sizing is important, because it relates directly to the value of objects. Try to vary the size of the objects and type in your design. Play a large image against small type or combine small objects with large lettering. But remember that there really are no rules; sometimes a design in which all the elements are the same size can be quite handsome.

To integrate large amounts of text into MacPaint it is probably easiest to use MacWrite. You can convert an entire MacWrite screen into a MacPaint document by taking a *snapshot* of the MacWrite screen pressing the Shift, Command, and number 3 keys together. The resulting snapshot can be loaded into MacPaint and manipulated there in the usual MacPaint ways (but no longer in the usual MacWrite ways).

If you do not use the snapshot method, however, and copy (to the Clipboard) from MacWrite and paste into MacPaint, type from MacWrite can be realigned to new proportions by pasting the text into a marquee of approp-

riate shape. The font itself will not change in size, but the words will realign to fit the marquee. If the marquee is too small to hold the entire text, you will lose what cannot be pasted into it. This method has its limitations and usually requires some trial and error, but you may find it useful, since type from MacPaint cannot be altered in this way.

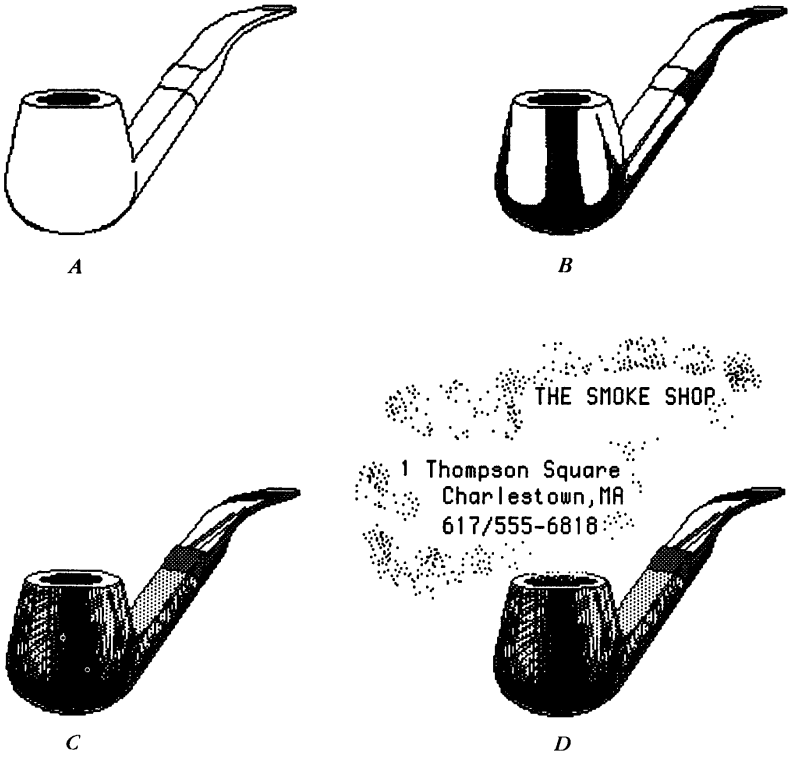
MacPaint's own text function works well for headlines, subheads, and other small or medium amounts of textual material. If you click on the text icon (represented by the letter *A*) in the tool palette, a vertical bar will appear on the screen. Twelve-point Geneva is the default font (the font that appears automatically when you start MacPaint), but you can change fonts easily using the Font menu. The available point sizes (point size refers to the height of the letters) varies from typeface to typeface, but can range from 9-point to 72-point.

The outlined point sizes for each typeface are the ones in which that type will look best. The solid point sizes will work too, but these sizes are created by MacPaint—approximated from one of the outlined sizes—and sometimes come out looking a little bizarre, and in the smaller sizes the letters sometimes fill in or block up. If you do want to use one of the point sizes that is not outlined, try to pick one that is an even multiple or divisor of one that is. (For example, if the font size 24 is the only one in outline numbers, 12 and 48 will look the best of all the ones listed in solid numbers.)

One final point. When using the text tool, if you have not set the line permanently (that is, clicked the mouse to set a new insertion point or selected a new tool), you can change the style, font, or size of the type in the active line or lines. Take advantage of this feature to cycle through the available fonts, font sizes, and font styles to choose the combination best suited to your current design. Now let's look at some sample designs.

The smoke shop trademark in Figure 35d was begun by copying the pipe from the Personal file (Figure 35a). The best way to start filling in or modeling an image from an outlined shape such as this one is to put the darkest tones in first. To do that, you must first decide on the direction of the light source, which in turn determines which side is shadowed. In Figure 35b, the right side is in shade, with the heaviest tones blocked in. The intermediate tones were added later for the final image shown in Figure 35c.

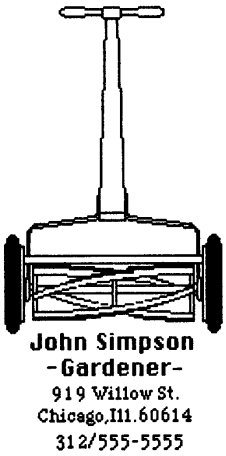
Figure 35



There are, of course, many ways to make a full-tone rendering. My method was to block in major tone areas (using the paintbrush with a small brush shape) for the entire pipe first, instead of noodling in great detail with one section or working methodically from right to left. This way, I get a better feeling for the entire shape. If the drawing becomes too dark, you can take the pencil and remove pixels, or use white in the spray can and dust over some sections. With the paint can you can add tone by filling in areas, providing the borders are sealed—the stem of the pipe was shaded this way. And remember, it's always a good idea to save the image in stages as you progress.

The next two designs (Figure 36) are strong, memorable images for a gardening service, even though most landscapers now use power equipment. Stacking the type under the handmower (see Figure 36a) lends a particu-

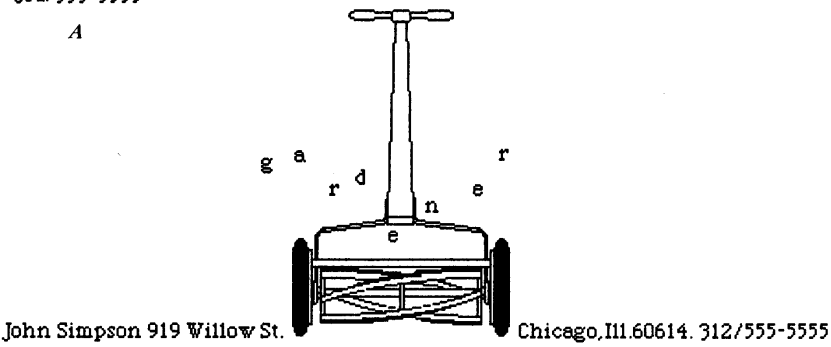
Figure 36



A

larly traditional look to the piece. MacPaint lets you do this easily—you can center lines of type automatically by choosing the Align Middle option in the Style menu.

Figure 36b is a more fanciful example; here the type is intended to resemble grass cuttings flying from the back of the mower. To achieve this effect, the long line of type was constructed first as two lines, because the whole address was too long to fit in one window. The type was then lassoed and moved in stages, using the grabber to push the page around in the window. To create the flying grass clippings, I typed the word "gardener" in an open area on the page, lassoed the individual letters, and dragged them into place above the blades. The pattern looks random, but it took some experimenting to get it to look even semispontaneous.



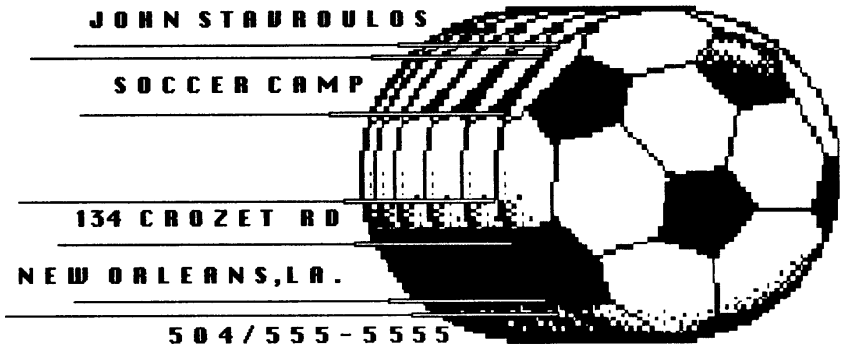
B

Figure 37

The typewriter in Figure 37 (from the Objects file) is a useful design symbol. Here I drew a white rectangle to create the piece of paper in the machine, and then entered the name and address. You can enlarge both the typewriter and the piece of paper if you wanted to present more information.

The soccer camp design (in Figure 38) could be used as a promotional piece. I created it by proportionally enlarging the ball, which was taken directly from the Sports file, using the marquee in conjunction with the Command and Shift keys. I then lassoed the enlarged ball and repeated the image by holding down the Option and Command keys. (If you want more control over the number and placement of repeats, hold down the Option key only and move the ball, release the mouse button,

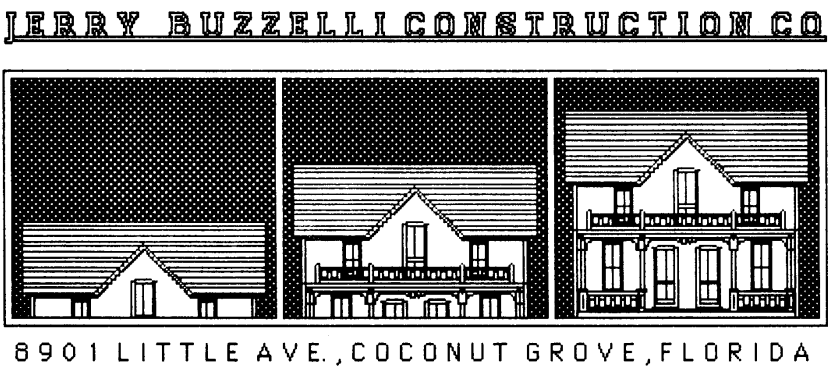
Figure 38



move it again, release the mouse button, etc.) To ensure a straight horizontal axis when repeating images such as this, you can first push the lassoed shape into a corner and then move along the top or side. If you press the mouse button and then move the pointer off the screen, the image is forced to follow the side of the window, and the repetitions will all be parallel, with the window acting as a straight edge. The speed lines which overlay the balls are actually long, thin, white rectangles created outside of the design and then lassoed into place. Type was created in unused space above the drawing and also lassoed into place.

To create the construction company logo in Figure 39a, I copied the house from the Buildings file and removed

Figure 39



A

the chimneys and added shingles to the roof (for no particular reason). I then made three copies of the house and, using the marquee, chopped off varying amounts of the bottom on two of the copies—since this is a logo for a construction company, it seemed appropriate to reveal more of the building in each square of the three-part design. (Actually, one copy of the house would have sufficed; the different sections could have been copied and moved using the marquee with the Option key.) The dark background behind the houses was used to offset the lighter type. The typeface here is New York, in underlined and outlined style, and each letter is separated by a space (words are separated by three spaces). A lighter, sans-serif typeface was chosen for the address and phone number below.

Another way of manipulating this image would be to actually build a house in the three frames. To make Figure 39b, the drawing of the house was taken apart piece by piece with the lasso. The individual elements, such as the porch and roof, were then cleaned up in FatBits to remove traces of other elements such as windows and parts of walls. The stripped-down version was placed in the first box. For the second, some parts of the house were lassoed back on. In the final frame, the entire house was used. The last frame was finished by using the paint can to fill the roof with a line pattern resembling shingles, to put a brick pattern on the chimneys, and to fill in the windows. The light background pattern in each frame adds cohesiveness

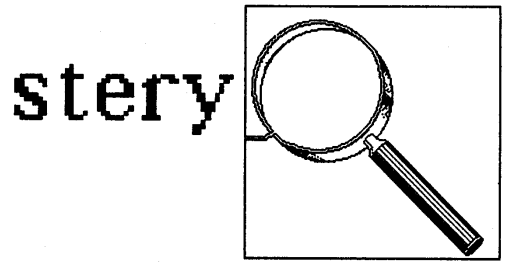
Figure 39 (continued)

B

to the design. The design could also have been created by working backwards from the complete image, deconstructing the house using the eraser.

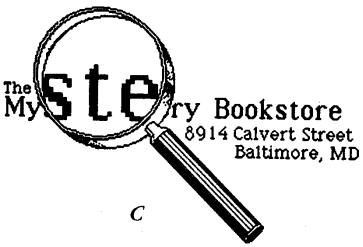
The magnifying glass in the Objects file can be used to graphically "enlarge" an object or piece of type to emphasize a point. In Figure 40c, the use of the glass to magnify the word "mystery" produces an effective logo for this specialty bookstore. In this example I used the glass from Mac Art Dept. without any modification. The title and the store information were set in small New York type; the "stery" in the word "mystery" was set in a much larger font size. The glass itself was then masked with a hollow rectangle (Figure 40a). Using FatBits, I opened a one-pixel-wide channel from the lens of the glass to the outside of the rectangle frame. Then the entire structure was lassoed and moved over the large "stery;" because of the mask, the letters only showed through the lens of the magnifying glass. Once the glass was positioned properly, the rectangle and channel were removed, the missing

Figure 40



A

B

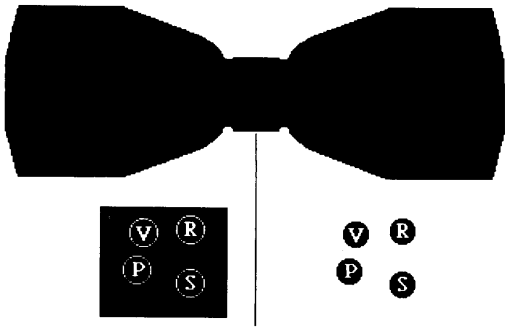


C

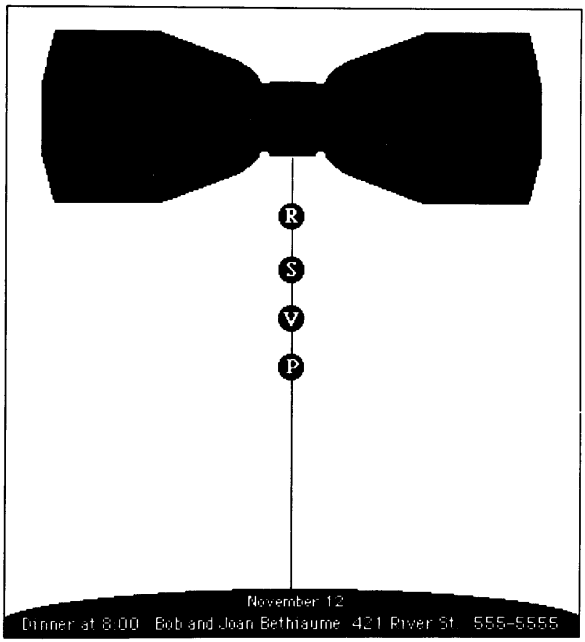
pixels were replaced on the frame, and the rest of the text and magnifying glass were jockied into position bit by bit (Figure 40b) with the lasso.

To create the dinner invitation in Figure 41b, I filled the bow tie outline from the Personal file with solid black using the paint can. I enlarged it, and then used FatBits to

Figure 41



A



B

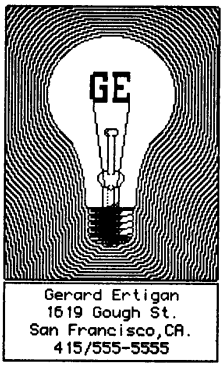
smooth out the contours. Next, the tie was moved into position near the top of the page, and a line was suspended from the center of the tie using the line tool with the Shift key depressed to keep it straight. I then typed out the letters "RSVP" (in New York bold) and surrounded each one with a small circle. I marqueed the four buttons, and used the Invert function to reverse black and white (Figure 41a). Next, I double-clicked on the pencil to enter FatBits. In this mode I used the eraser to remove all the black pixels from around the buttons, which were, back in normal size, lassoed and moved into position along the line. The type at the bottom (except for the date) was keyed in, then put in invert white on black in a long, narrow marquee. The cummerbund shape was created from the top of a large ellipse drawn by the hollow circle in the tool palette. The upper arc was lassoed and moved to the top of the rectangle containing the inverse type, and the resulting white wedge was filled with black. Finally, the date was typed out, inverted, and moved to the top of the cummerbund.

The spilled ink in the stationery store logo in Figure 42b adds a humorous aspect to the design, because the image it projects is contrary to our expectation—a business like this should be neat and orderly. I began by copying the ink bottle from the Desk file. The store's name was set in a normal straight line with an additional space between each of the letters. The curve of the bottom edge of the ink bottle was recreated by lassoing and copying (by holding down the Option key) the bottom of it and erasing in FatBits all but the lowest row of pixels. The label lettering was then lassoed, letter by letter, to fit onto the curve. The curve guide was lassoed and a copy was placed above the lettering, the ends of the curves were joined, to form a box for the letters, using the line tool, and the finished label finally lassoed and moved onto the bottle. The ink blot was then drawn freehand with the pencil, checked for leaks in the outline by moving along the line in FatBits, and filled with solid black using the paint can. The rest of the words were typed, then marqueed and inverted to make a negative that could be lassoed into position on the blot (Figure 42a).

When you marquee an image and use the Trace Edges command, you achieve an effect similar to outline type: a double line surrounds an object previously outlined by a

Figure 42

Figure 43



single line. As we have seen, by repeatedly clicking on Trace Edges, you can create a ripplelike effect with contour lines filling the marquee to its boundaries. It's a little like Op Art—usually more of a toy than a valuable tool, but at times this effect is appropriate.

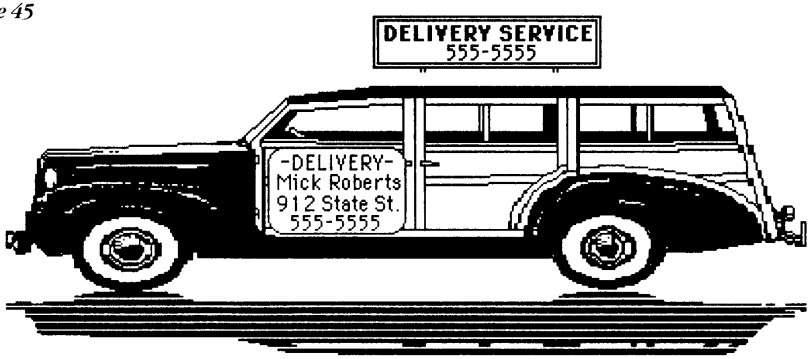
I used this technique to produce Figure 43. I made two copies of the lightbulb (from the Household file) and used Trace Edges on one of them. If you try it yourself, you will see that the image gets lost when the edges repeat inside the form as well as outside. To correct this problem, you can, as I did in this case, paste an unaltered image back over the pattern, making the design readable again. To finish off the logo, I put a box around the type and set it flush with the larger box containing the bulb. The letters *GE* were typed out in 24-point Athens bold, marqueed, and placed over the filament of the light bulb.

Figure 44

The French Dry Cleaners' logo in Figure 44 uses the hanger symbol straight from the Personal file. The towel was constructed using the line tool and pencil. The type is bold italic 14-point Venice, center-aligned.

For Figure 45, I copied the station wagon from the Travel-2 file and placed it, using the marquee, on the far left side of the window. With the arrow in the middle of the right side of the marquee, I dragged the mouse (while holding down the Shift and Command keys) to elongate the image until it filled the width of the screen. In doing this, the front windshield and hood became jagged, so I fixed them up in FatBits. The image was then marqueed and moved to the top of the window, a duplicate was made and moved to the bottom of the window, and the duplicate was flipped vertically while still marqueed.

Figure 45

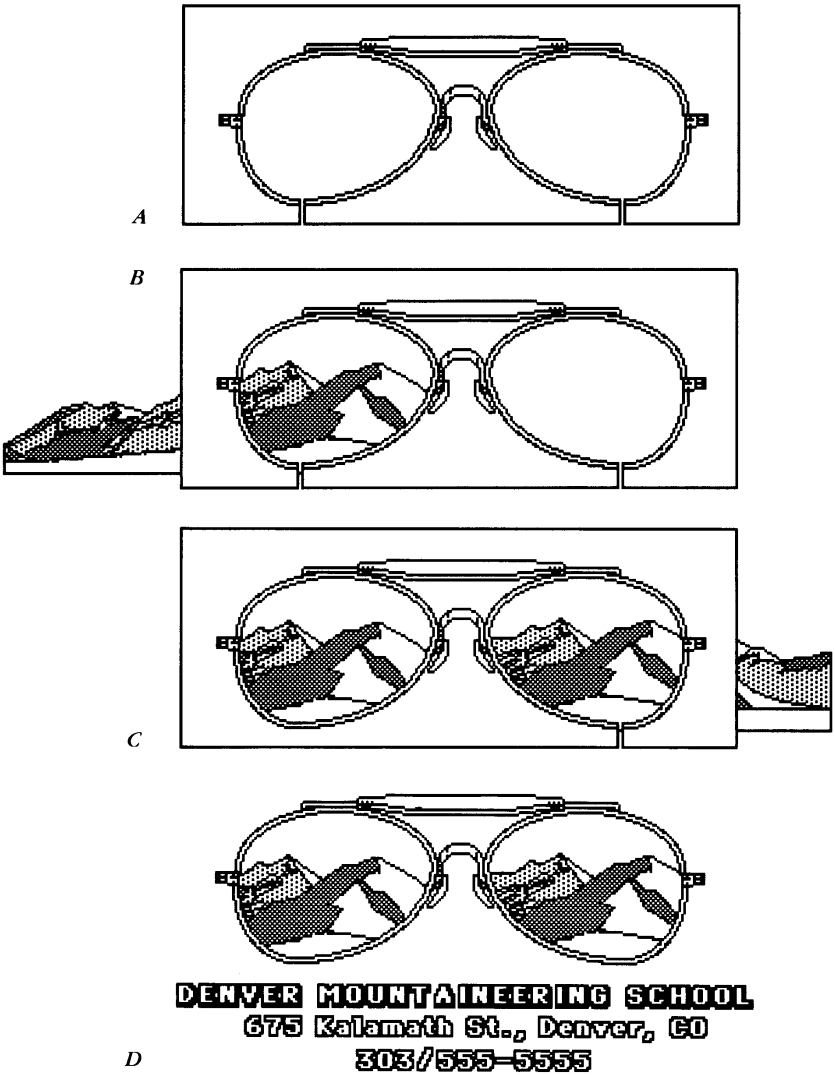


I opened channels into the windows of the upside-down image so that they wouldn't be filled, then lassoed the image and made it into a silhouette by selecting Fill (with a striped pattern selected in the pattern palette) from the Edit menu. After I marqueed the silhouette again, I compressed it by placing the pointer on the bottom edge of the rectangle and moved it slowly in toward the center of the image (while holding down the Shift and Command keys)—if you are following along on your Mac, you should note how the striped pattern changes and becomes darker. In this example, the new pattern created during compression is quite effective. The compressed, striped shadow was finally moved to connect with the line drawing of the car. This reflection effect is an easy-to-duplicate trick that can be applied to any Mac Art Dept. image.

The lettering on the car was first typed off to the side of the image and aligned using the Align Center function. It was then enclosed using the hollow rounded rectangle from the tool palette. The rectangle was then lassoed and placed on the door of the station wagon. An alternative to the door method would be a sign on top of the car. The one in Figure 45 was created by first setting the lettering, then enclosing it in two rectangles built using the hollow rectangle tool. Another alternative would be to place the type in a cloud of smoke issuing from the tailpipe. If you are designing lettering to go with an image, one approach is to work with the letters outside of the area and then lasso them in, checking for size as you go along. This is the process I used in this example. Another equally valid approach is to type out the message first, then fit your image around it.

The sunglasses, pulled from the Personal file, in the mountaineering school logo in Figure 46d, reflect an appropriately mountainous background. The first step in creating this design was to copy the mountains from the Travel-1 file and duplicate them. A mask was built around the glasses and two small one-pixel channels were opened from the lenses to the outside of the rectangle (Figure 46a). The whole mask was then lassoed and the left lens was positioned over a copy of the mountains that had been previously truncated on the right end so that nothing would appear in the right lens (Figure 46b). The mask

Figure 46

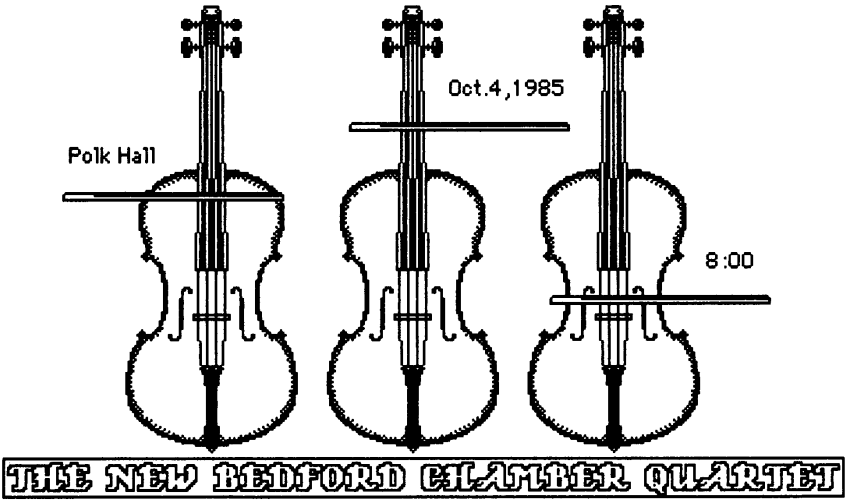


was unlassoed and then the mountain/mask combination was lassoed again and moved so that the right lens was properly positioned over the second copy of the mountains (Figure 46c). The lasso was undone again, the mask and the bits of mountain sticking out on the right and the left were erased, and the channels through the glasses frame were repaired in FatBits. The shadow-outlined type

was centered below the image in the usual manner. In your own work, you can choose anything as a reflection, but remember that whatever is reflected should look slightly different in each lens, as it does in this example.

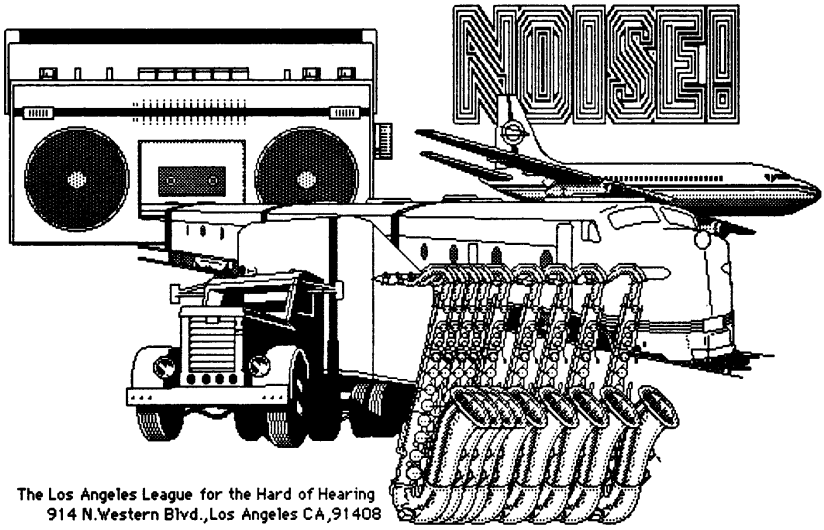
The violin used in the announcement in Figure 47 was copied—as was the bow—from the Music file and pasted three in a row. (This same image, by the way, can be enlarged and used as a cello or bass viola.) The bow was then marqueed, rotated (with the command in the Edit menu) into a horizontal position, and lassoed to a different place on each violin. Type was handled in two ways: first the title was set in outline (and placed in a box) to complement but not detract from the images, then the location, date, and time were set in a regular type style above the bows.

Figure 47



The composite drawing of noisy objects in Figure 48a was assembled from items from various files. I positioned the radio first; then, in the following order, the airplane, train, and truck. The saxophone was pasted down in a blank part of the page, and using the lasso, multiple copies were created by holding down the Option and Command keys. The multiple copies were lassoed and moved as a unit over the rest of the images. As I worked, I toggled in

Figure 48



A

NOISE!

NOISE!

B

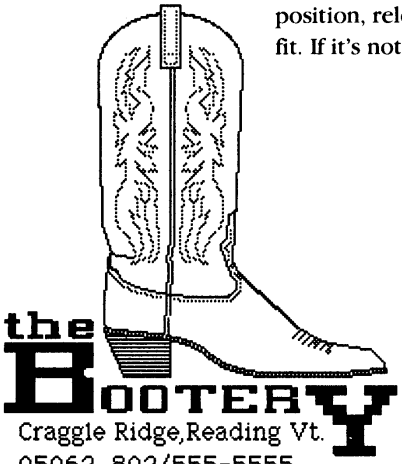
and out of Show Page to see how the overall design was progressing, since only part of the design could be worked on at a given time.

The word "NOISE" was set in 48-point Chicago. Because the "jaggies" were rather pronounced at this size, I used FatBits to clean them up. The stair-steps on the *N* and *S* were leveled off (Figure 48b) using the line tool as a guide. Next, the entire word was marqueed and stretched to make it taller. To create even more of a sense of aggravation, the word (still in the marquee) was subjected to the Trace Edges feature from the Edit menu. The block of type was then lassoed in close to the airplane.

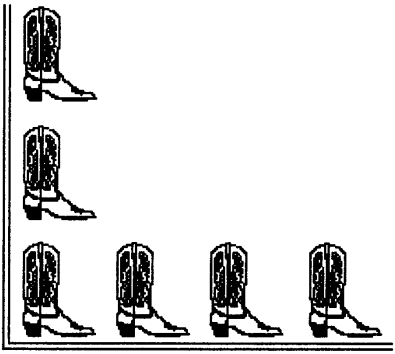
To get the plane to overlap the letters, I lassoed the drawing and moved it over the type. Since the entire piece was, at this stage, larger than a single window, I actually

lassoed a section of the whole, and then moved the rest of the drawing, in pieces, up to meet it. This is easy to do. I lassoed the right-hand part of the drawing and moved it to slightly overlap the type. After it was in position, I scrolled the window down using the grabber, lassoed the lower right-hand section, and moved it up to the rest of the drawing. And so on with the left side. Cutting apart and joining sections in this manner is not difficult. The lasso is the best tool to use for this purpose; it makes an irregular cut that can be fit back in place in only one way—like a jigsaw puzzle. Just slowly move the lassoed piece back into position, release the mouse button, and check for a proper fit. If it's not right, simply hit the Undo and try again.

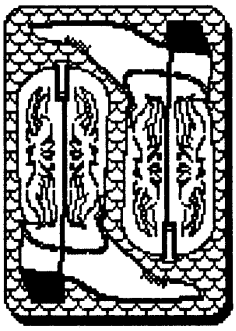
Figure 49



A



B



C

The boot logo in Figure 49a was made by manipulating type in a trial and error fashion around the drawing from the Personal file. Figure 49b is an example of the same object shrunk in size, repeated, and used to create a border. The "rubber stamp" of the two boots in Figure 49c was created by rotating a copy of the boot, boxing the two boots in a hollow rounded rectangle, filling the box with a snakeskin pattern, and placing the whole thing over a shadow. Boxing things into a rectangle with rounded corners is a useful device for designing logos, trademarks, or company identity symbols. It's probably the simplest way to create a design using the Mac Art Dept.

Full Page Designs

For some final examples of ways to use images from Mac Art Dept. files, let's look at some full page designs.

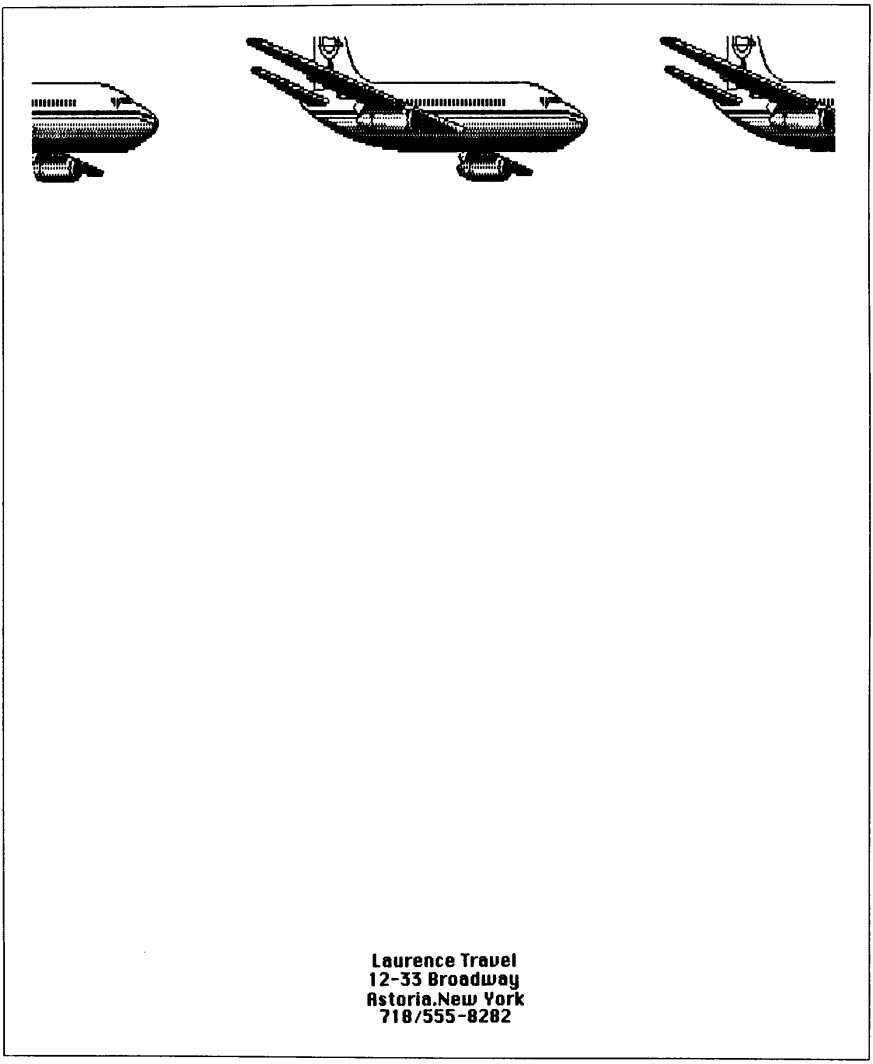
Figures 50, 51, and 52 are letterheads for a travel agency. I started the major image of the three planes used in all three letterheads by copying the plane from the Travel-1 file. Next I created a duplicate plane, for safety's sake. Then I stretched the marqueed plane vertically. I made a duplicate of the now somewhat fatter plane, and cut it in half by placing the marquee over only half the plane and then moving the marquee to one side.

I moved the front of the split plane to the left side of the page and the back of the plane to the right side, and positioned the complete plane in the center. Toggling in and out of Show Page mode (by double-clicking the grabber) helped to space out the planes evenly.

My design intent here was to convey the constant movement associated with travel activity. While the first two versions (Figures 50 and 51) are reasonably successful in this regard, the last letterhead (Figure 52 on page 67) is an example of overkill—there is just too much going on here. The suitcase containing type would be fine by itself, but the two ideas together bludgeon the travel theme. The moral of this story: don't be heavy-handed. Let a simple idea breathe.

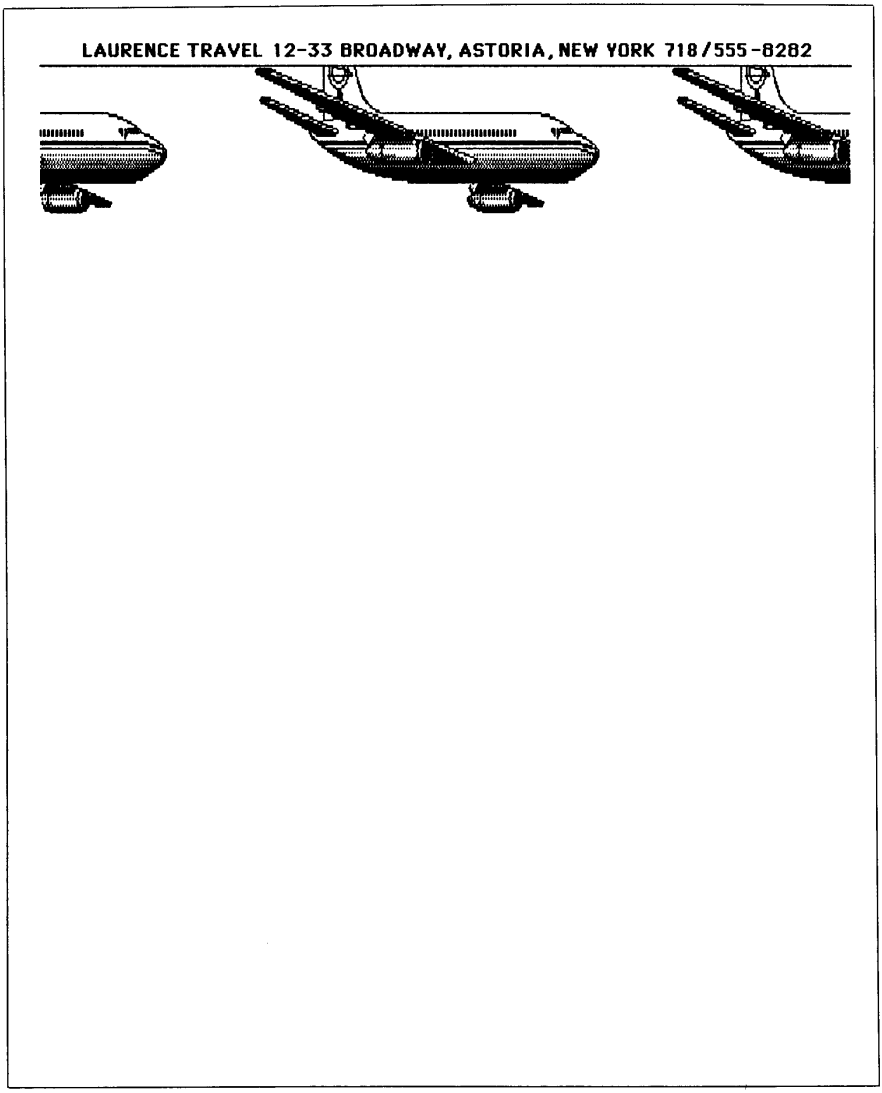
Other ways to approach this design problem include printing the company name on the side of an enlarged airplane, or using the plane as a border or as a "ghosted" wallpaper design covering the entire page.

Figure 50



The woman's name written in lipstick in Figure 53 (page 68) was created by first clicking the paintbrush icon twice (to call up the Brush Shape display) and choosing the largest round shape, and next lightly scripting the name in black. I then copied and pasted the lipstick case and cover

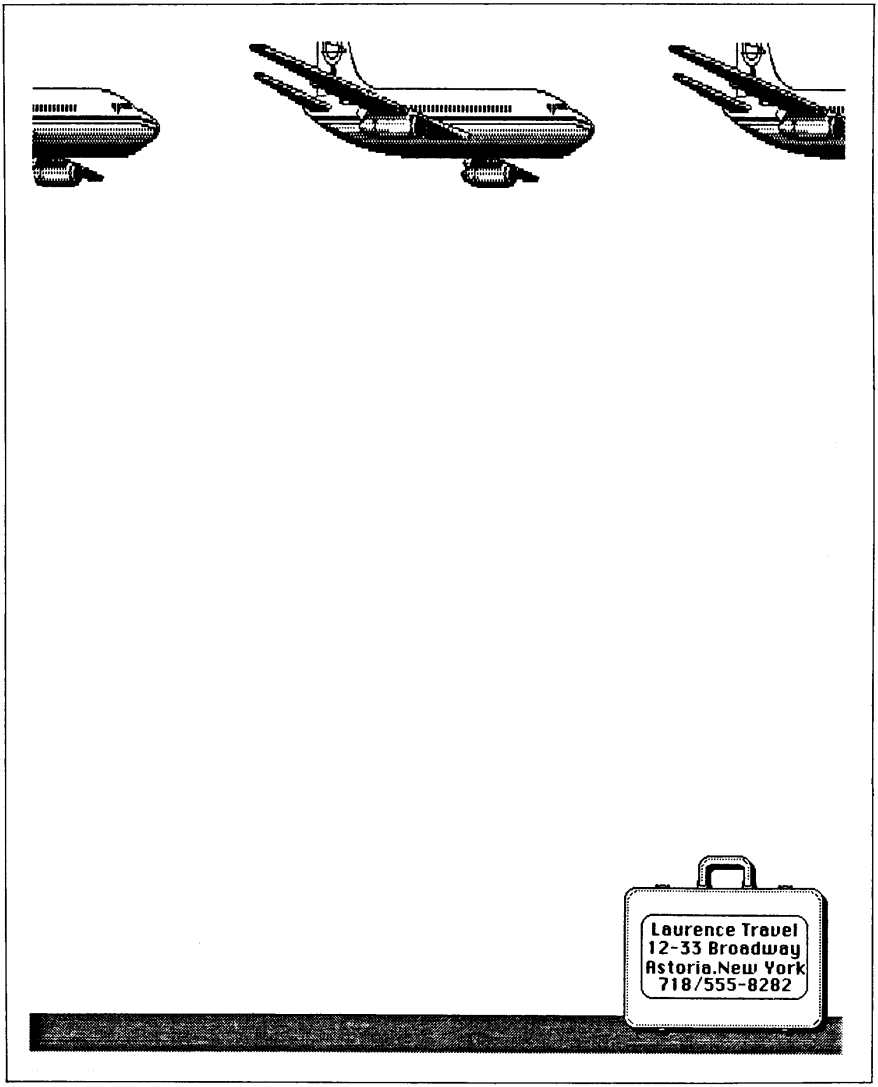
Figure 51



into the corner. The script appeared too dark at this point, so I lassoed my first effort and used the Fill command (in the Edit menu) to set the letters in a lighter tone.

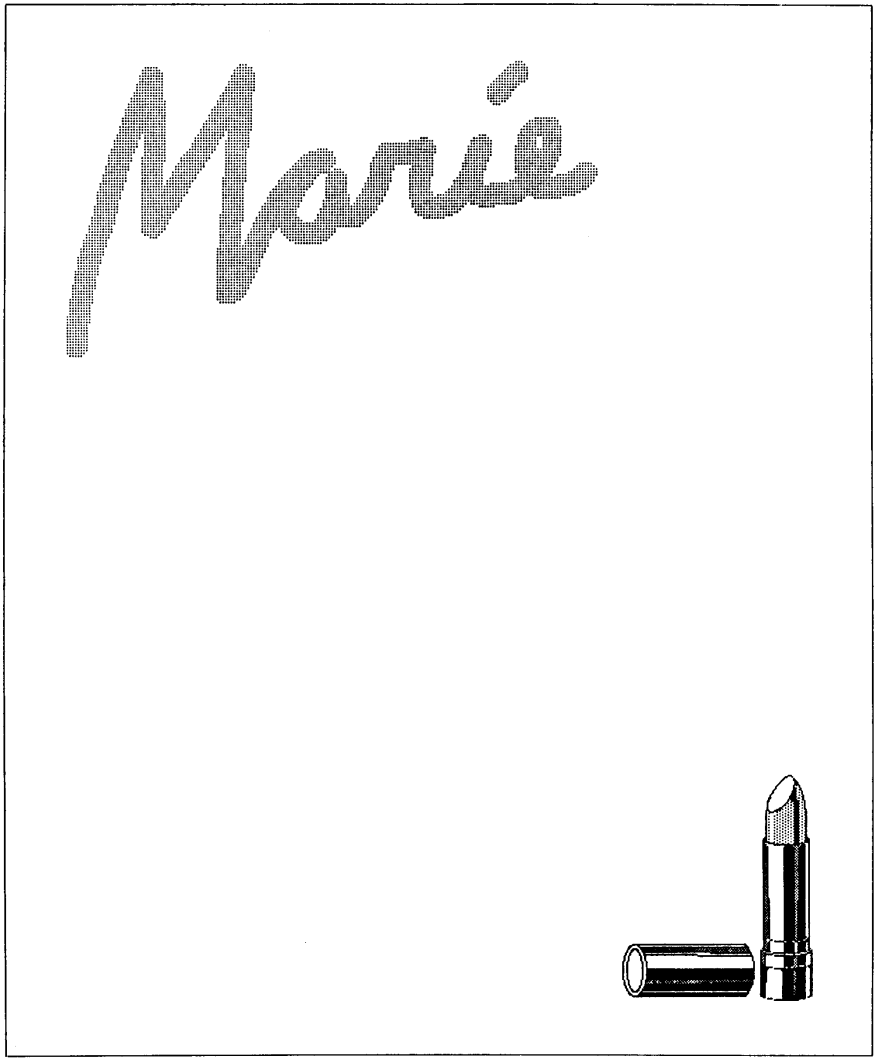
The graphic trick of placing a shadow behind an object and slightly off-center is called a drop-shadow technique.

Figure 52



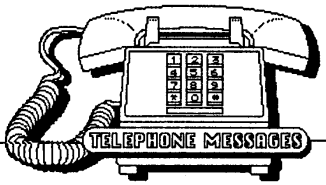
Any object in Mac Art Dept. can be treated this way. An example is the telephone notepaper shown in Figure 54 (page 69). The original telephone image comes from the Desk file. To make the shadow, I created a silhouette of the phone by lassoing a copy of it and filling it (from the

Figure 53



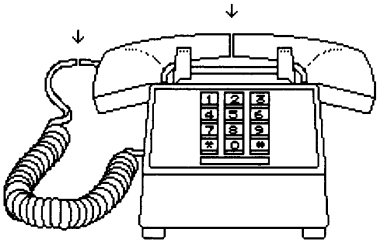
Edit menu) with black. With such a complex form, this method of filling a solid shape is much simpler than trying to use the paint can to fill in each separately-contained area. However, channel openings in the receiver and cord were necessary to keep the open areas in the phone image

Figure 54

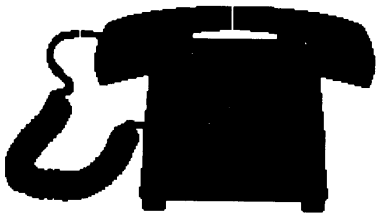


white (Figures 55a and b, page 70). The next step was to lasso the line drawing of the telephone and move it over the shadow (the channels in the phone are necessary for this step as well). Once these operations were complete (Figure 55c), pixels were replaced or removed in FatBits

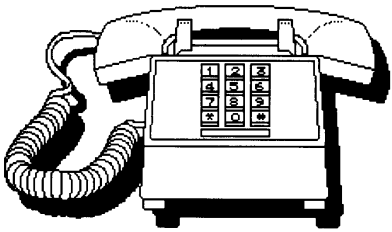
Figure 55



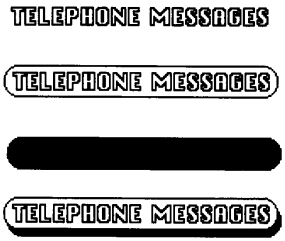
A



B



C



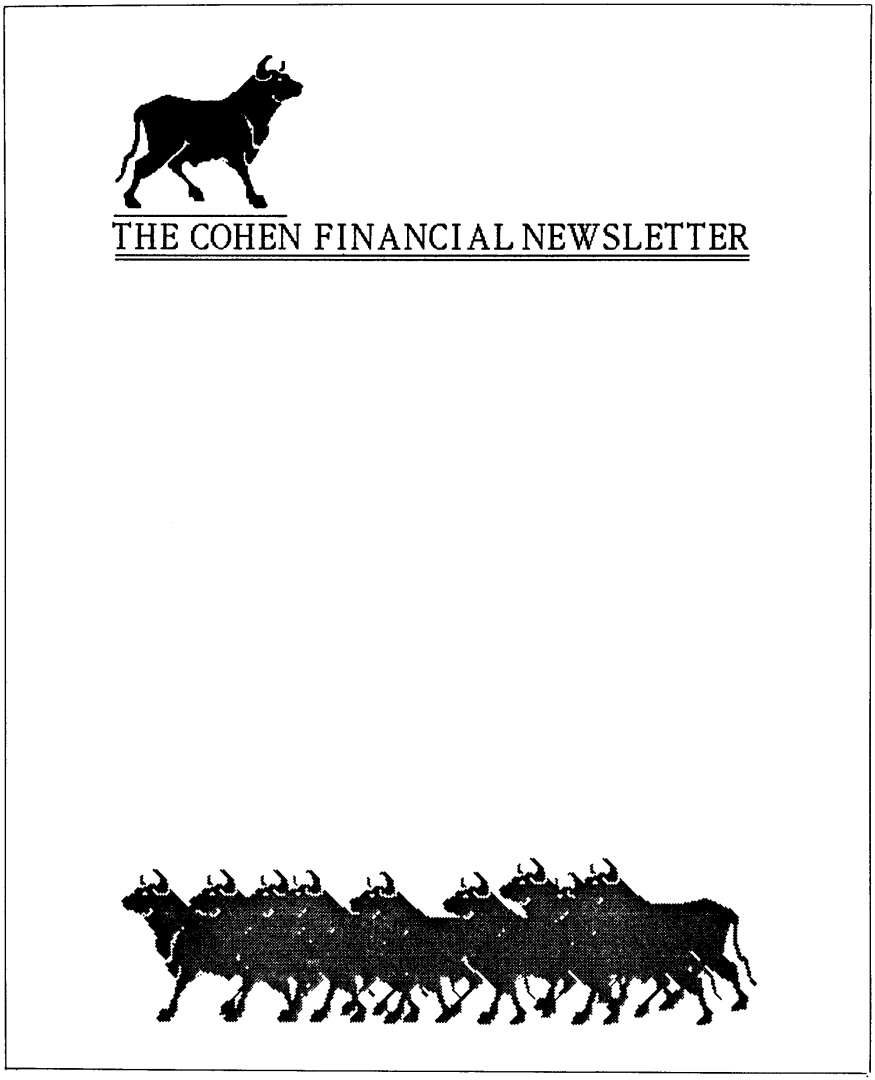
D

to get rid of the channels and clean up both the phone and the shadow.

The type for the label was Geneva bold outlined; the blank for the label was made of separated halves of a circle connected by straight lines. The type was lassoed into the label, which in turn was lassoed and placed over a previously filled copy of the label (Figure 55d).

The bull in the financial newsletter title page in Figure 56, which looks somewhat like the Merrill Lynch bull, was copied from the Animals file. The concept here, placing one object so that it faces in a different direction from a group of similar objects, is a great way to attract attention. All you need to do is marquee any object, from a toaster to a fish, then select Flip Horizontal from the Edit menu. In

Figure 56



this example, I filled in the herd of bulls with the paint can and a gray pattern. The type here is New York, underlined with a second underline, which was added with the line tool. The type was set on two lines in one window, then lassoed and moved to fit on one line across the whole page.

Figure 57

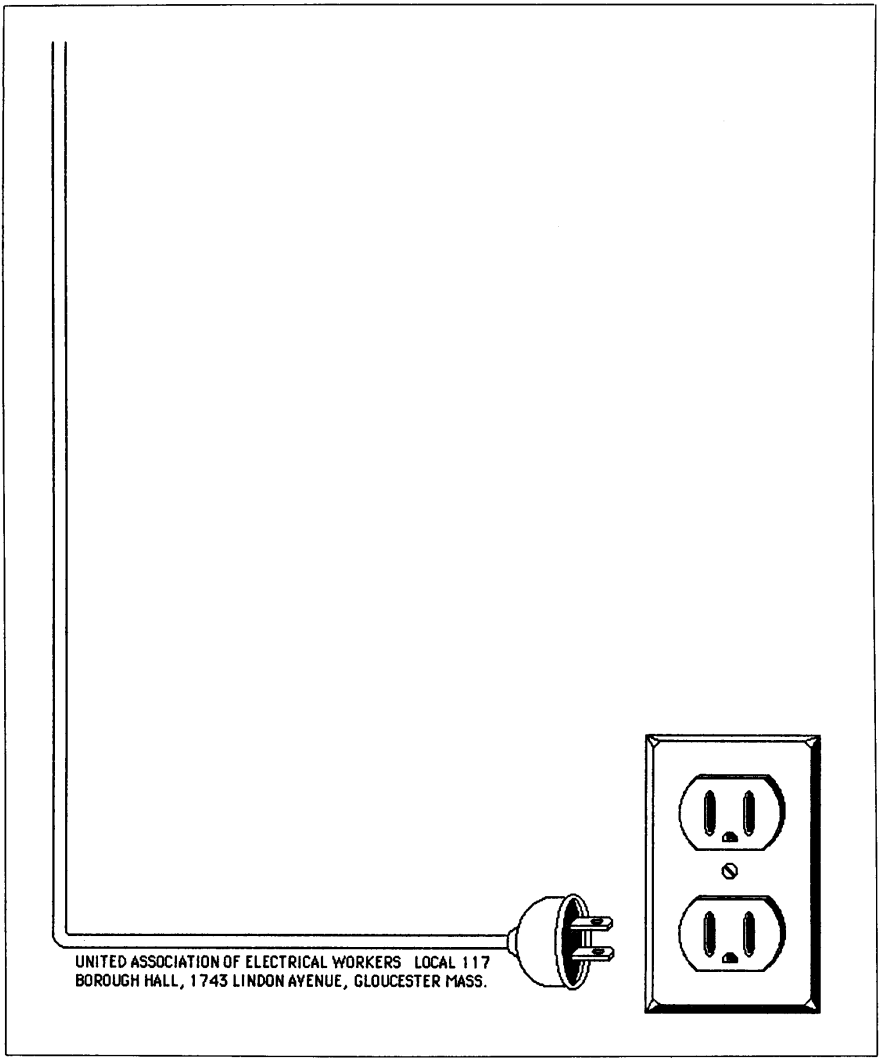
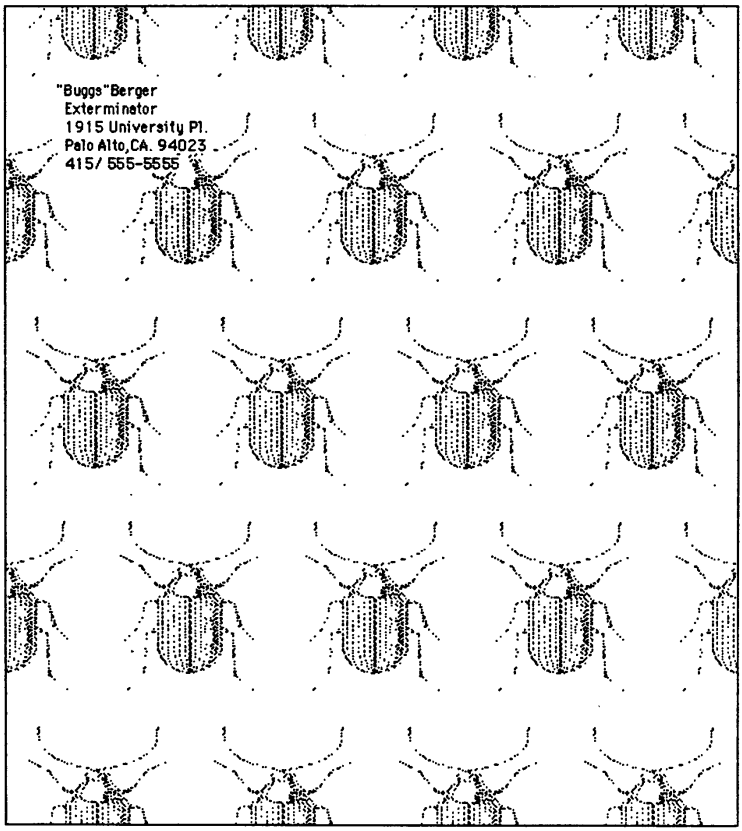


Figure 57 is a union local letterhead that uses unaltered drawings right out of the Tools file. The cord is merely an extension of existing lines, with the corner constructed in FatBits. The type could be placed almost anywhere in this design: along the cord, as it is here; on the outlet; or between the plug and the outlet.

Figure 58



In the exterminator's stationery, shown in Figure 58, I copied a bug, strangely enough, from the Insects file and then spray painted it with white to fade the image. For an all-over design like this, I created a *stamp* with the lasso and used it to copy the image over and over to make the pattern. The stamp actually consisted of a group of three

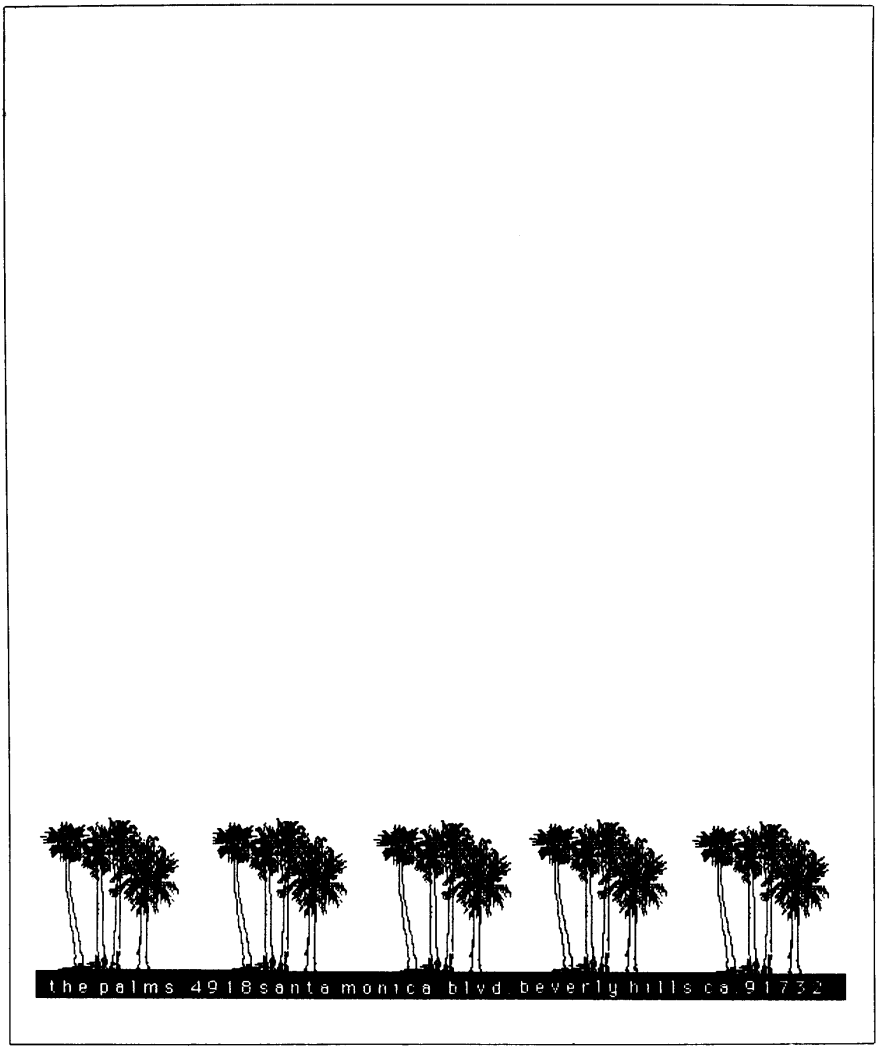
insects: you need at least three objects to lay out a full page of properly spaced images. Of the three, two must be on one line and the third above or below. This configuration gives you both the vertical and horizontal alignment necessary to work up, down, and across the page. Each time you move, one of the objects in the stamp of three should overlay an existing object on the page. In other words, one object becomes the registration mark for the other two. If care is taken to drop the new item exactly on top of the existing one, the spacing will be perfect over the entire page.

Since it's impossible to paste something half on and half off the screen, which you would need to do to repeat the pattern all the way to the edge, a single line border was drawn to act as a margin for the page. Stamped bugs that went over the margin were cleaned up with the eraser along the outside of the border. Another suggestion: try to keep the cutoff on the repeated object symmetrical on both sides of the page. You can always break up the page with asymmetrical type or by placing an object at the top of the page. Also, remember that when you place type on a page like this, a white area travels with and around each letter, isolating it from whatever it is placed over. Thus you need not worry about the underlying pixels interfering with the text.

The palm tree grouping in Figure 59 is a hotel/restaurant letterhead. I copied the group of four trees directly from the Plants file and pasted it five times in an even row across the bottom of the page. The type was set using the space bar to separate each letter by one space and each word by two. The words were typed on two lines in one window, then marqueed, inverted, and finally lassoed into position at the bottom of the page.

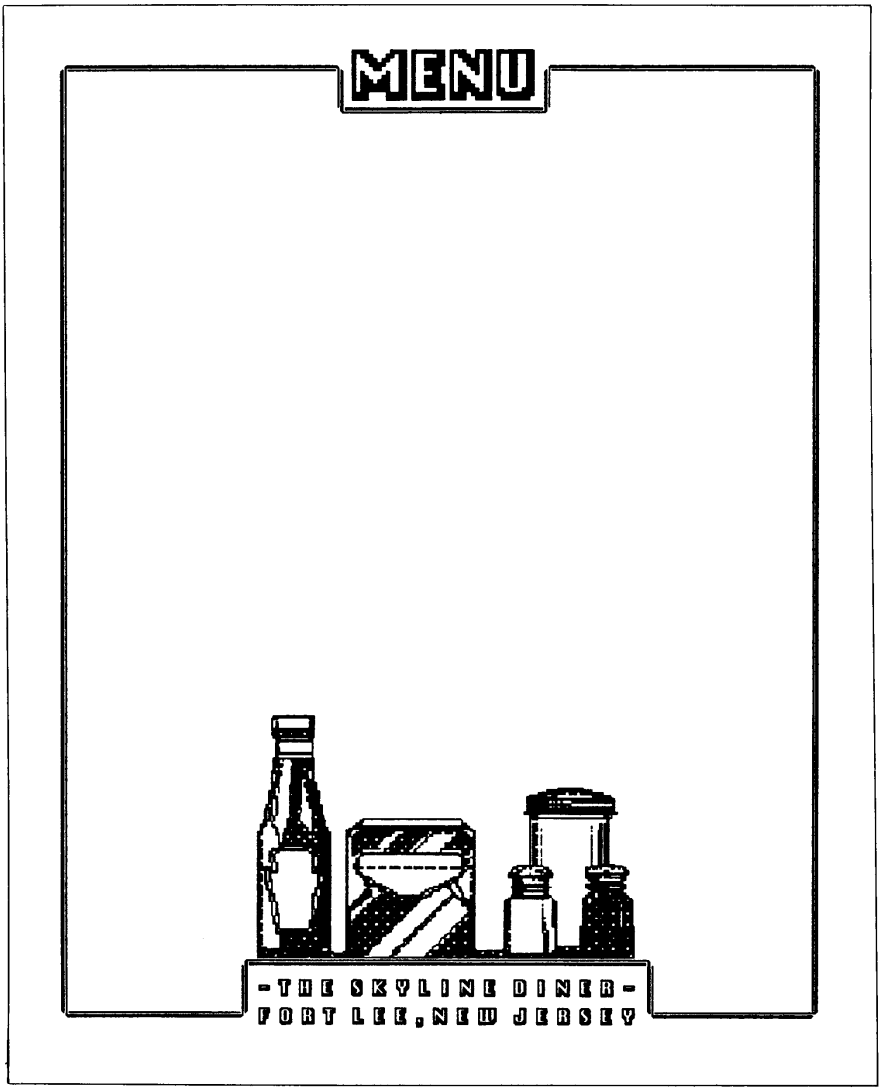
To create the diner menu in Figure 60 (page 76), I copied the condiments and napkin holder from the Food file. I then marqueed the grouping and reduced it proportionately (by placing the pointer in a corner of the marquee and pressing the Shift and Command keys while dragging the mouse). Once reduced (you need only release the mouse button when the reduction is complete; you don't need to turn off the marquee), the image was proportionately enlarged back to its original size. This technique produces a hard-edged, slightly abstracted look.

Figure 59



Here, it was successful; it created a nice architectural feeling. The borders were constructed from scratch and manually turned inside out at the corners. When building the border in this example, the Grid function in the Goodies menu was helpful for properly locating the corners as I went along.

Figure 60



To create the Bazaar Trading Post letterhead shown in Figure 61, I copied the elephant from the Animals file. A gray tone pattern was dropped in using the paint can after sealing off the right tusk in FatBits (a number of the small white areas must be filled in separately). Next, a perfect circle was drafted by using the circle tool while holding

Figure 61

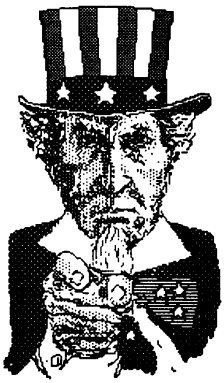
down the Shift key. This circle was filled with the pattern that resembles basket weave, using the paint can. The elephant was then lassoed and positioned over the circle. Finally, this combined symbol was marqueed and reversed with the Flip Horizontal function to make its counterpoint "bookend."

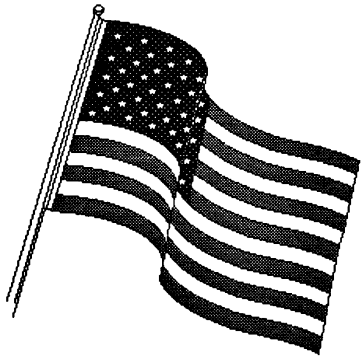
The store name was typed, marqueed, and then stretched vertically. (Although I already mentioned that stretched type is usually best avoided, if you have a need for it you will find that vertically-elongated type works much better than horizontally-extended type. The verticals remain the same width when you elongate type and can come out looking rather well—when you stretch type sideways, the letters tend to bulk up unevenly and usually look rather messy.) The frame around the type was made of two hollow rectangles (from the tool palette), one inside the other, with one pixel separating them. In FatBits, a black pixel was placed between the two rectangles at every other interval, giving the border a checkerboard look. The elephants were moved apart with the lasso, and the rectangle containing the type lassoed into place between them—the tusks had to be redrawn to overlap the frame. Finally, the address and phone number were typed using the Align Middle command, and then lassoed into place.

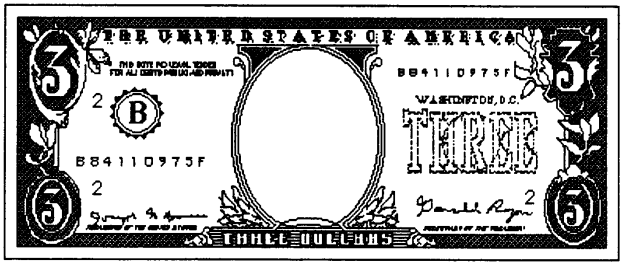
Appendix
Mac Art Dept. Files

(Listed in Alphabetical Order by File Name)

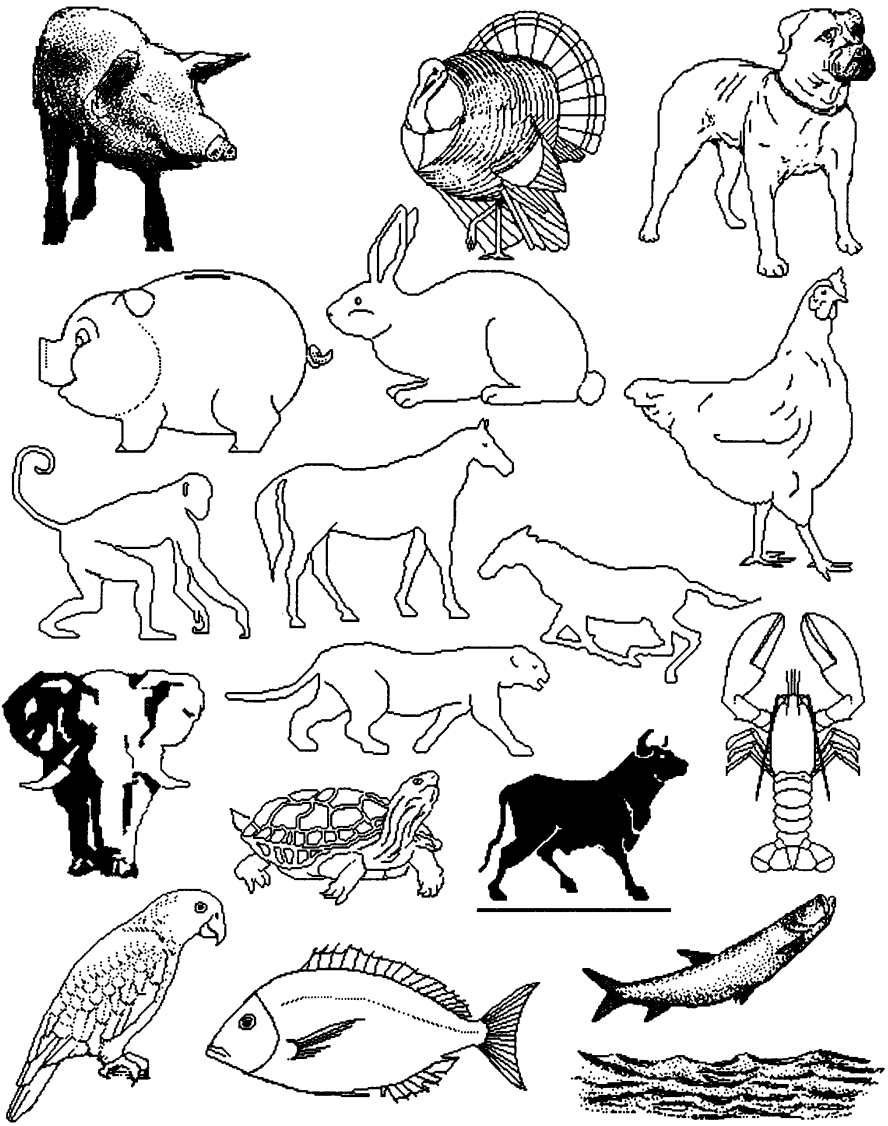
America



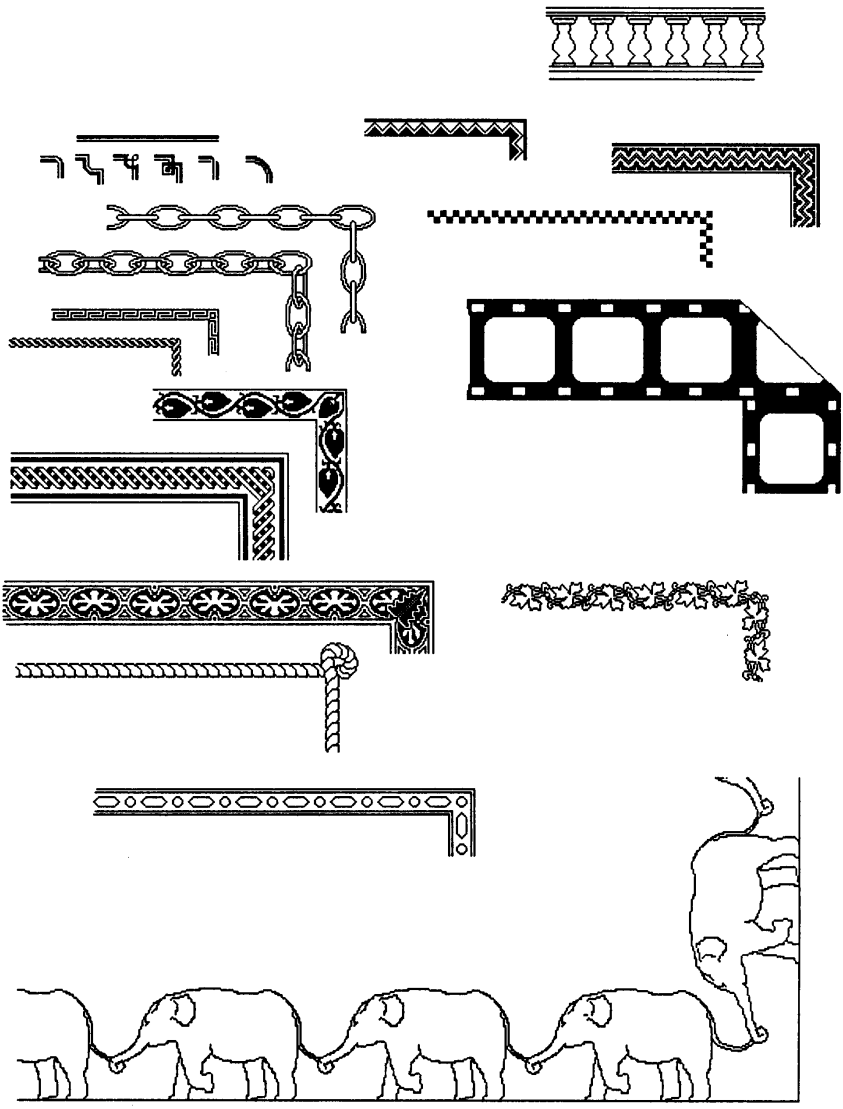




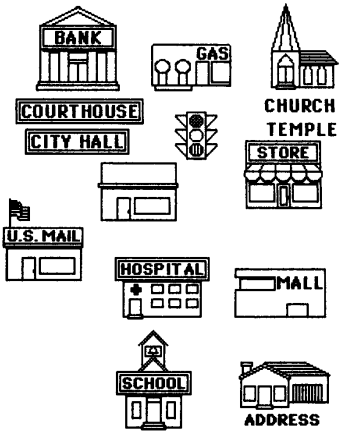
Animals

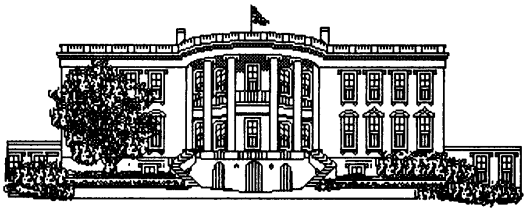


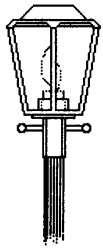
Borders

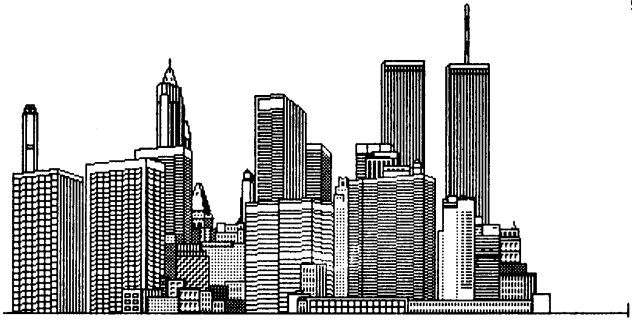


Buildings

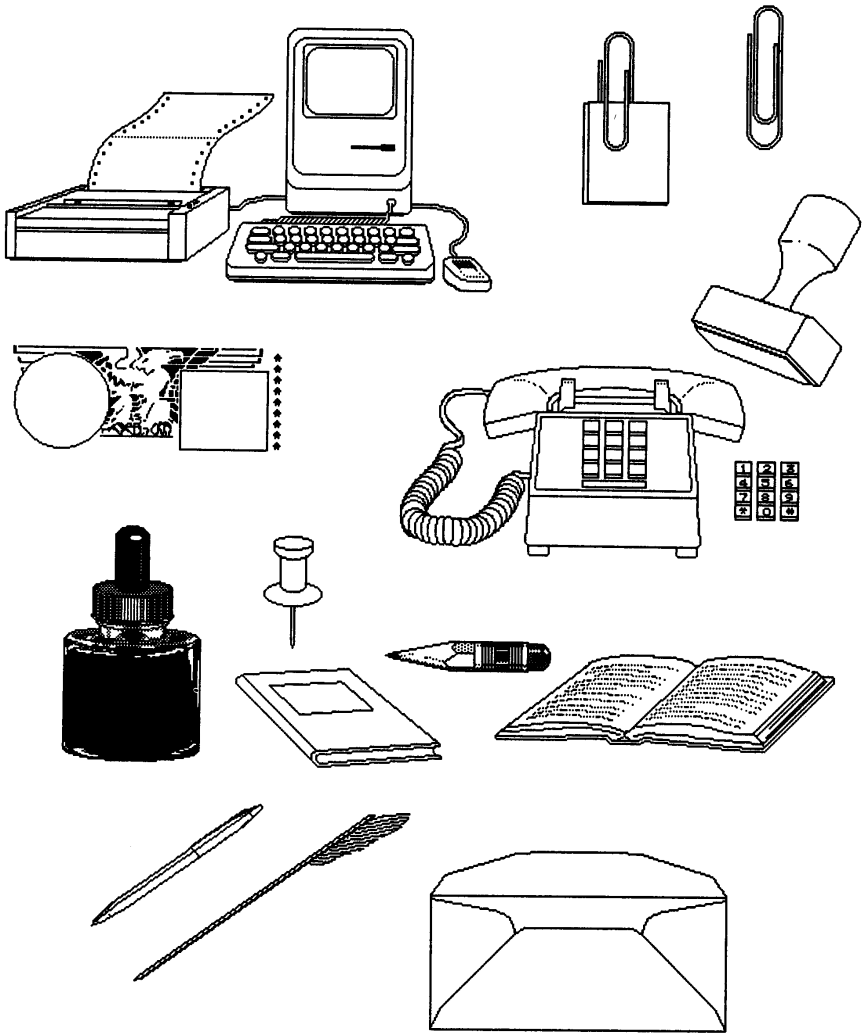

BANK
GAS
CHURCH
TEMPLE
COURTHOUSE
CITY HALL
STORE
U.S. MAIL
HOSPITAL
MALL
SCHOOL
ADDRESS



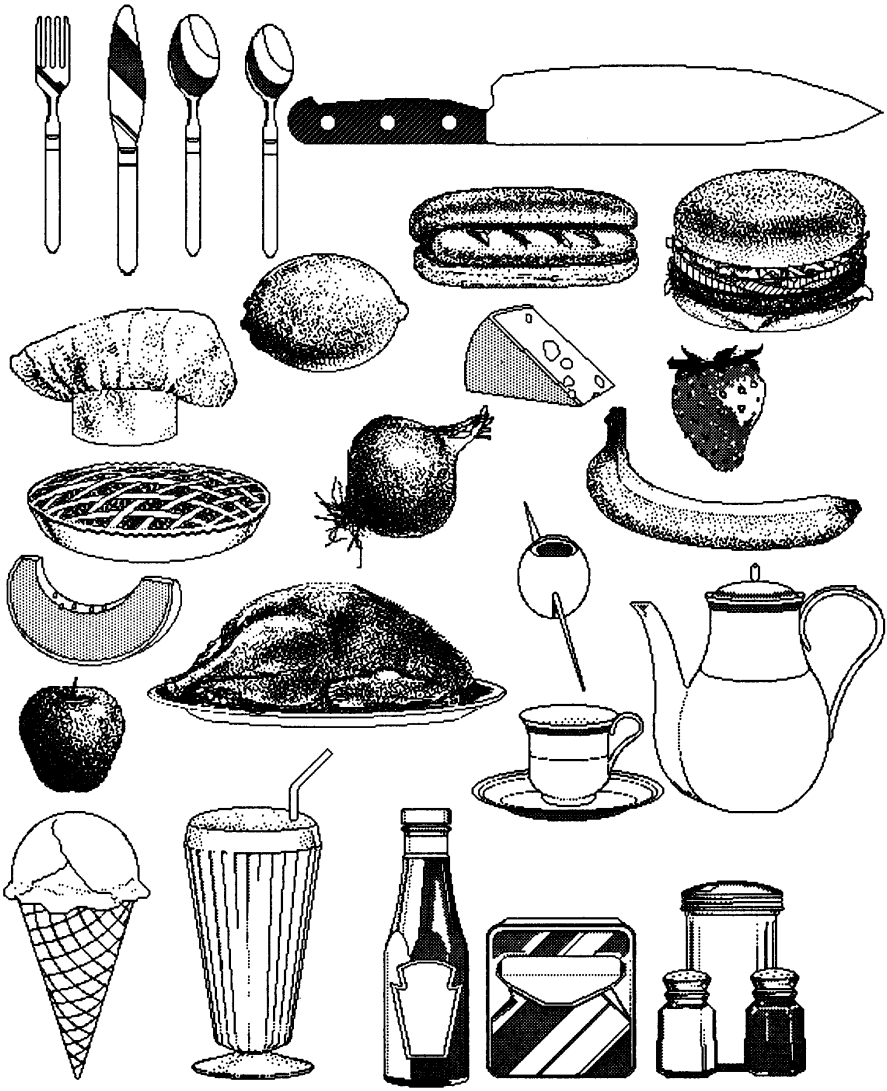




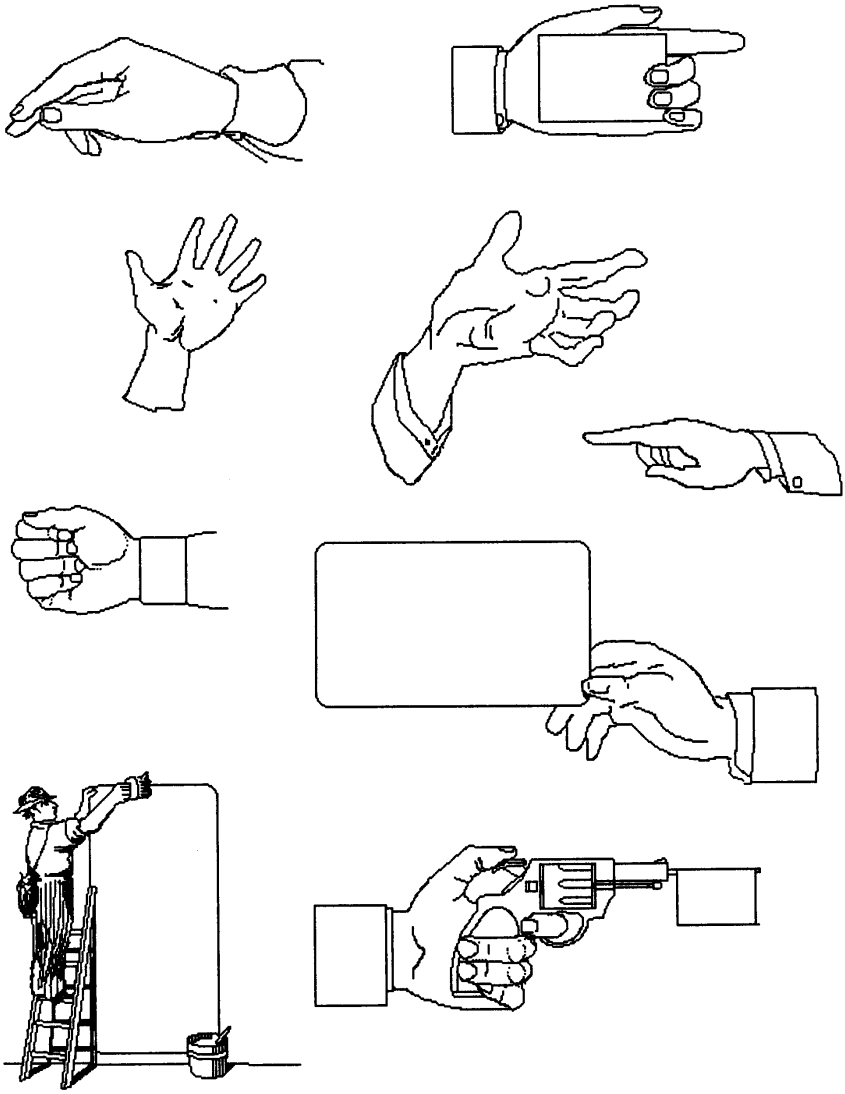
Desk



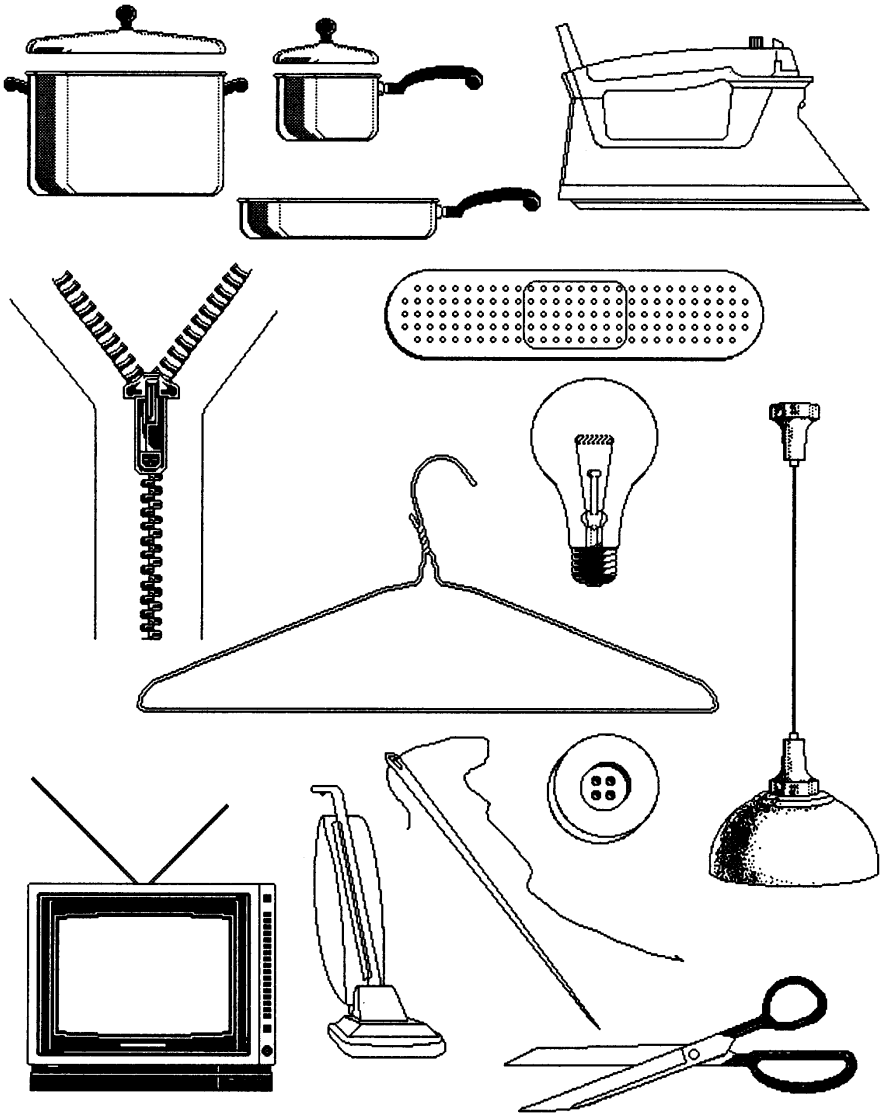
Food



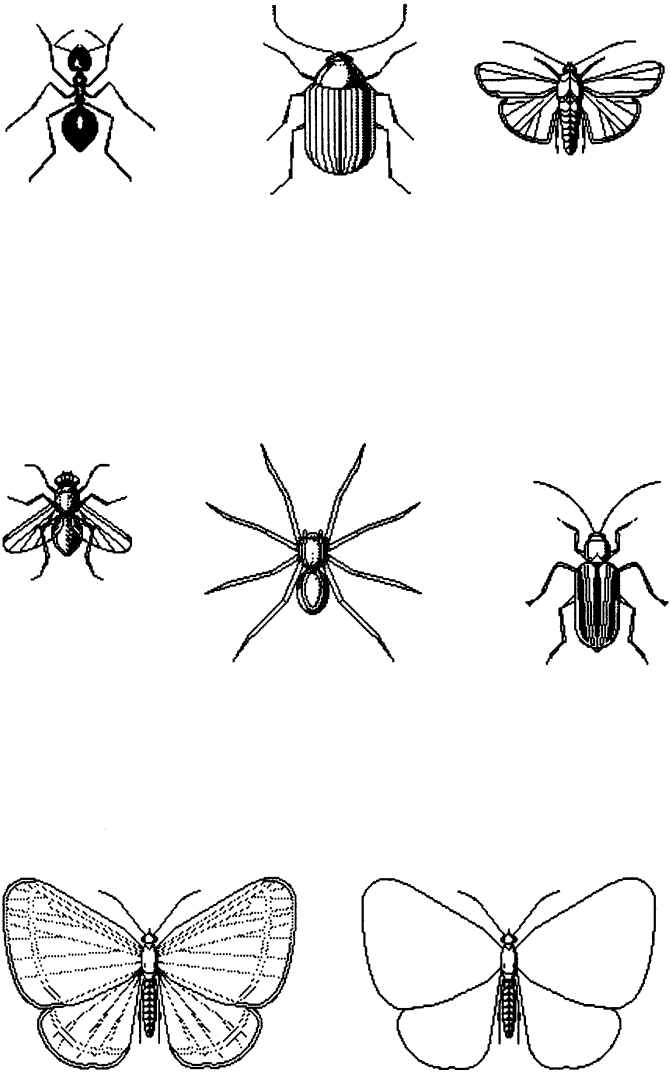
Hands & Signs



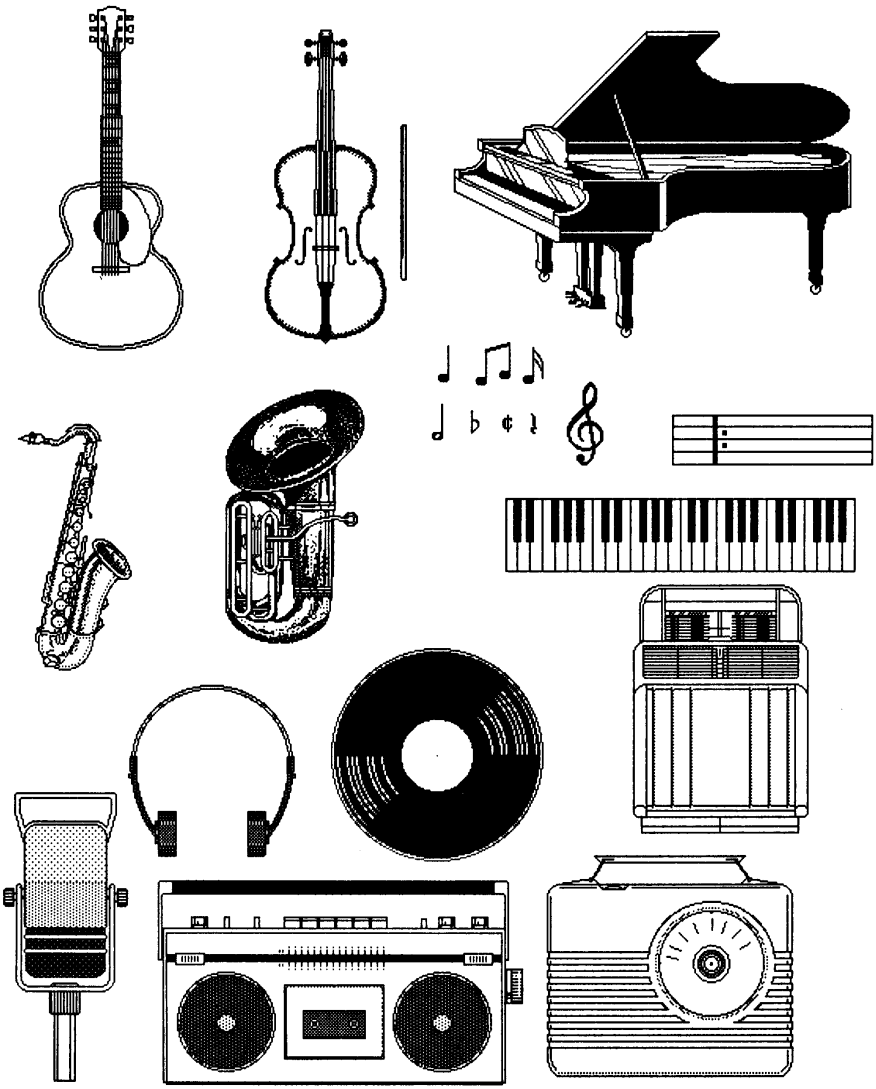
Household



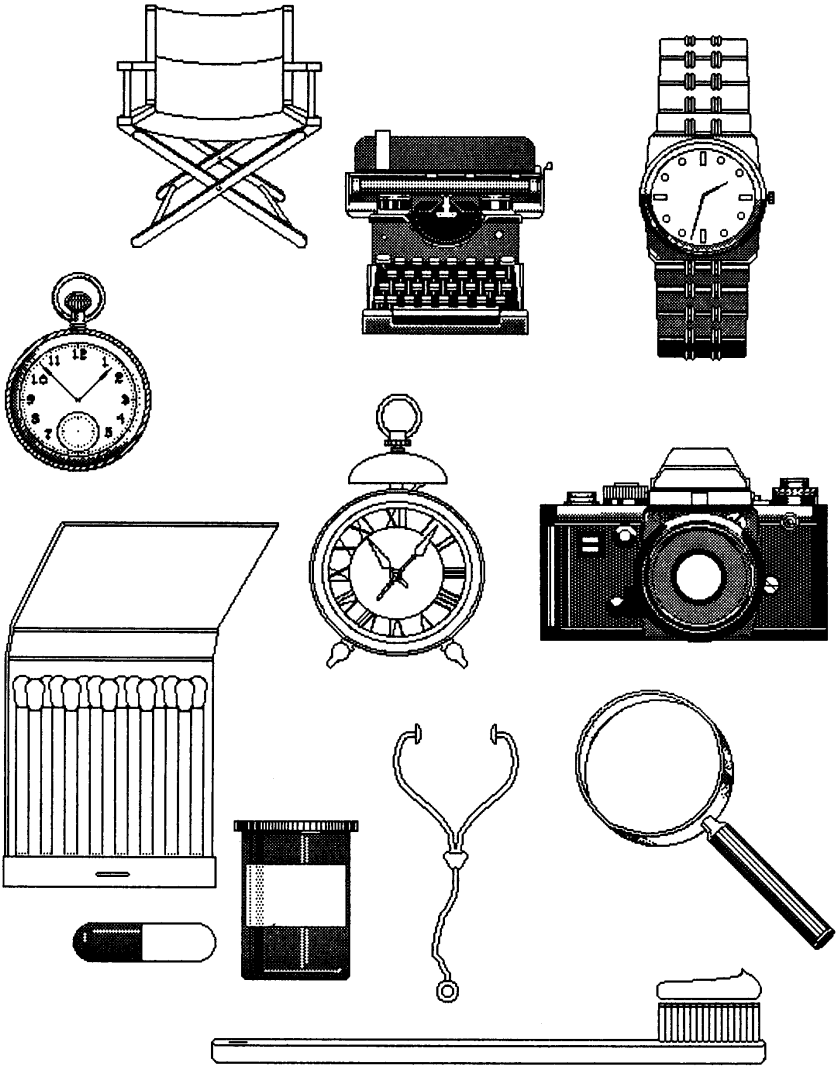
Insects



Music

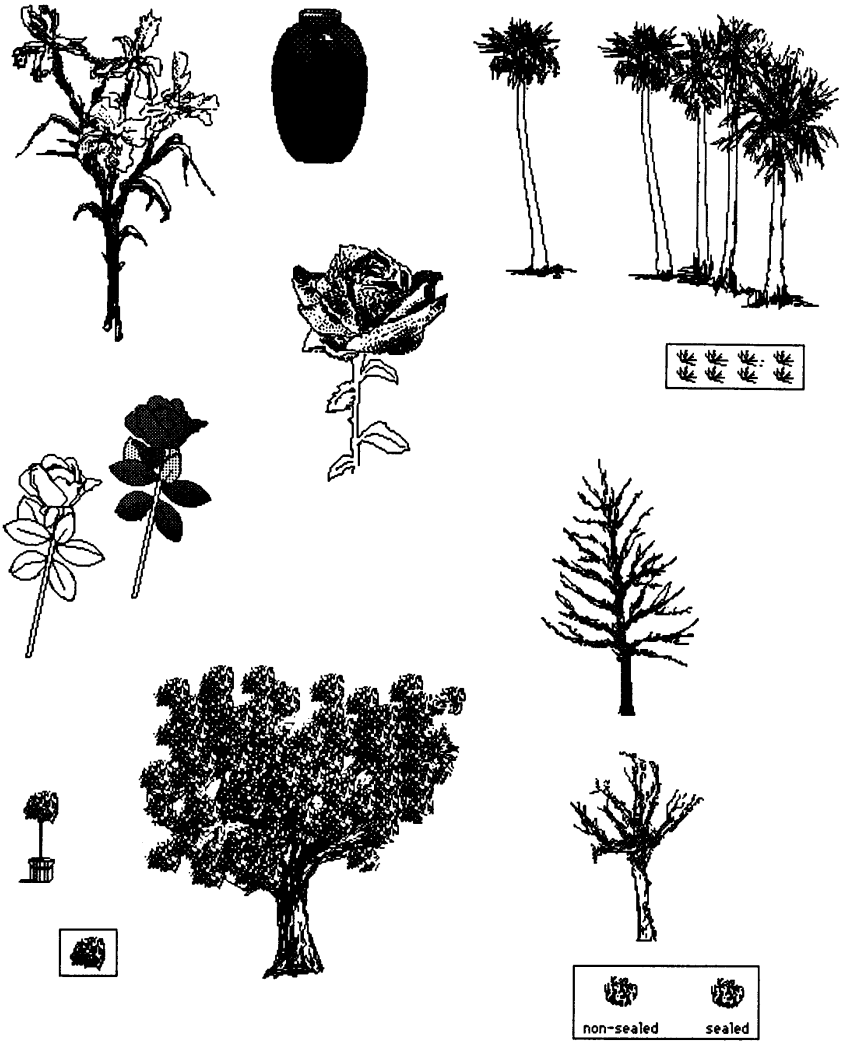


Objects



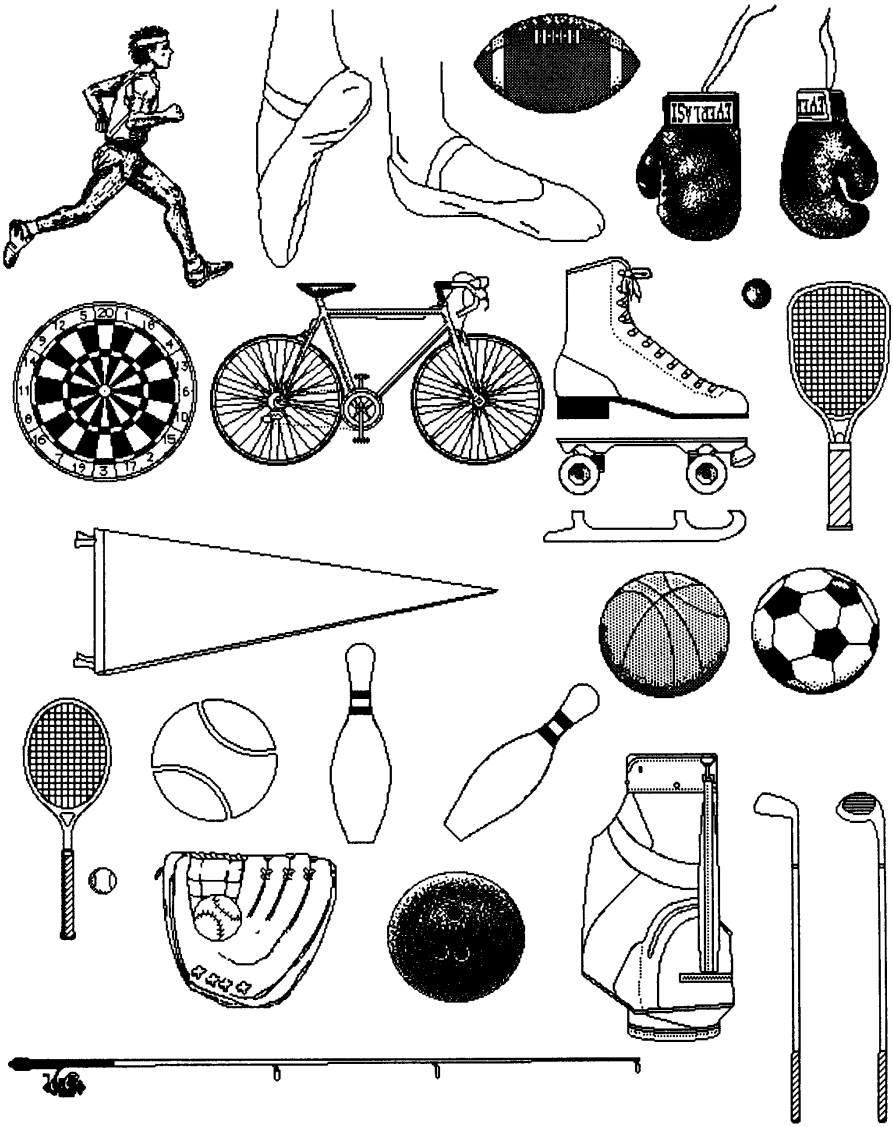
Personal

Plants

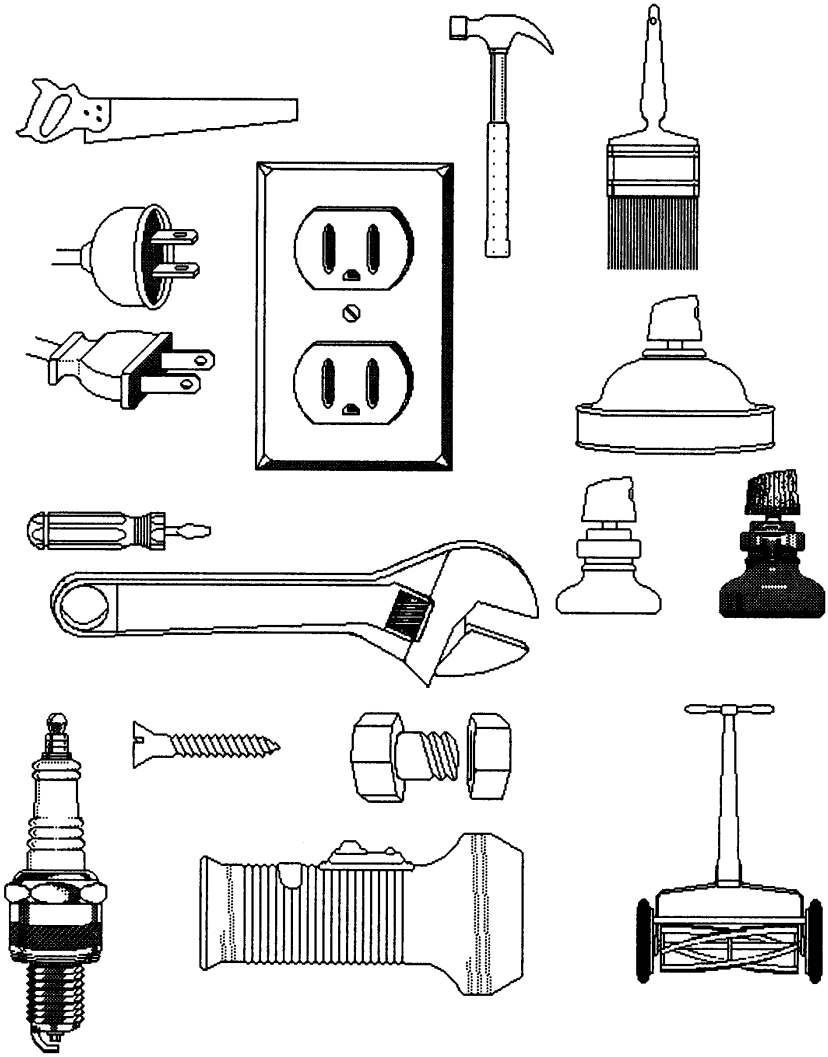


Seasonal

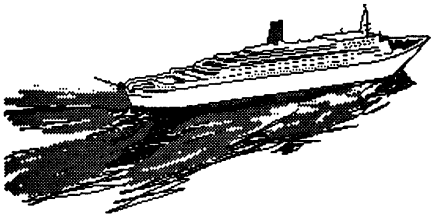
Sports

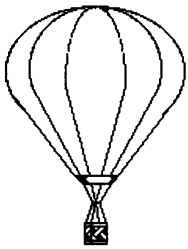


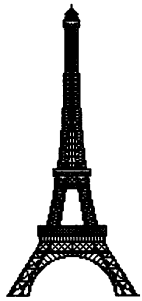
Tools

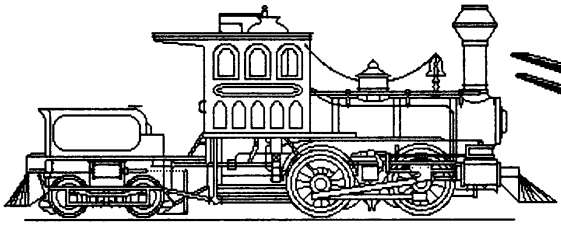


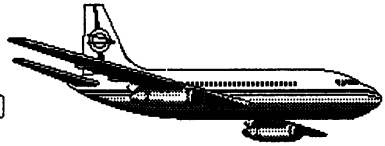
Travel-1

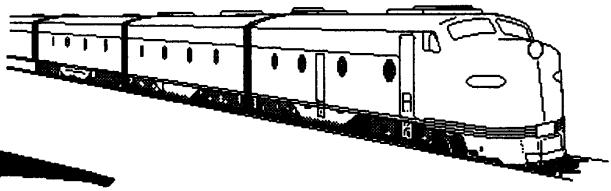


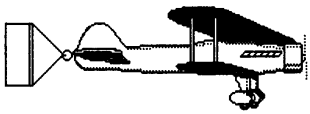




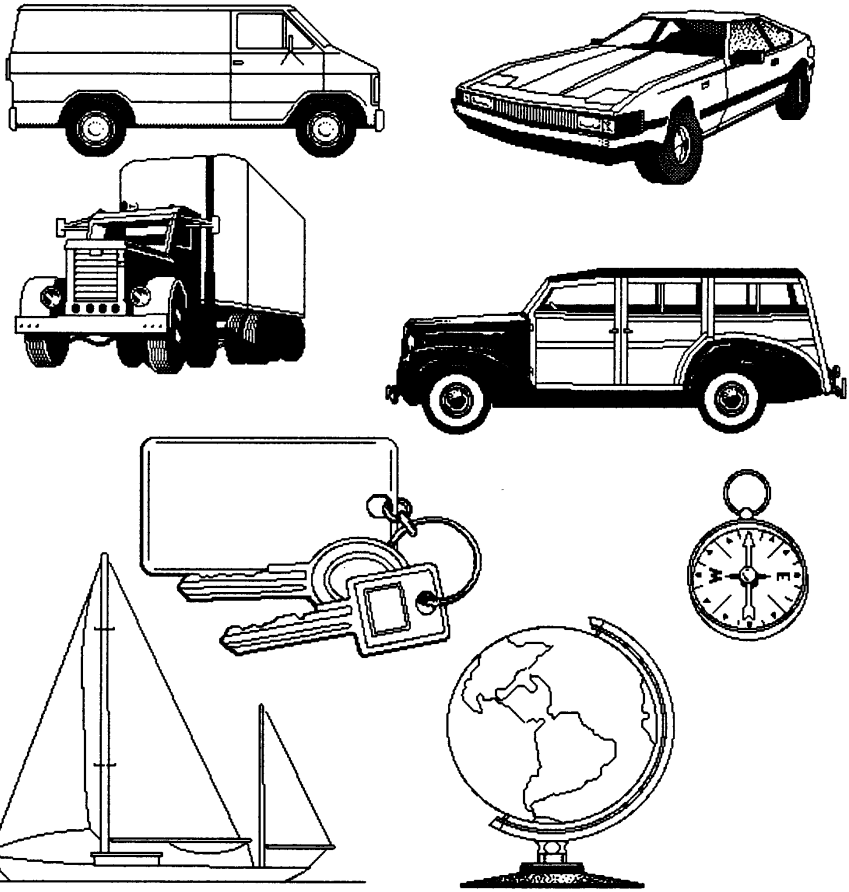








Travel - 2



Important! Read Before Opening Sealed Diskette
END USER LICENSE AGREEMENT

The software in this package is provided to You on the condition that You agree with SIMON & SCHUSTER, INC. ("S&S") to the terms and conditions set forth below. **Read this End User License Agreement carefully. You will be bound by the terms of this agreement if you open the sealed diskette.** If You do not agree to the terms contained in this End User License Agreement, return the entire product, along with your receipt, to *Simon & Schuster, Inc., Computer Software Division, 1230 Avenue of the Americas, New York, New York, 10020, Att: Refunds,* and your purchase price will be refunded.

S&S grants, and You hereby accept, a personal, nonexclusive license to use the software program and associated documentation in this package, or any part of it ("Licensed Product"), subject to the following terms and conditions:

1. *License*

   The license granted to You hereunder authorizes You to use the Licensed Product on any single computer system. A separate license, pursuant to a separate End User License Agreement, is required for any other computer system on which You intend to use the Licensed Product.

2. *Term*

   This End User License Agreement is effective from the date of purchase by You of the Licensed Product and shall remain in force until terminated. You may terminate this End User License Agreement at any time by destroying the Licensed Product together with all copies in any form made by You or received by You. Your right to use or copy the Licensed Product will terminate if You fail to comply with any of the terms or conditions of this End User License Agreement. Upon such termination You shall destroy the copies of the Licensed Product in your possession.

3. *Restriction Against Transfer*

   This End User License Agreement, and the Licensed Product, may not be assigned, sublicensed or otherwise transferred by You to another party unless the other party agrees to accept the terms and conditions of this End User License Agreement. If You transfer the Licensed Product, You must at the same time either transfer all copies whether in printed or machine-readable form to the same party or destroy any copies not transferred.

4. *Restrictions Against Copying or Modifying the Licensed Product*

   The Licensed Product is copyrighted and may not be further copied without the prior written approval of S&S, except that You may make one copy for backup purposes provided You reproduce and include the complete copyright notice on the backup copy. Any unauthorized copying is in violation of this Agreement and may also constitute a violation of the United States Copyright Law for which You could be liable in a civil or criminal suit. **You may not use, transfer, modify, copy or otherwise reproduce the Licensed Product, or any part of it, except as expressly permitted in this End User License Agreement.**

5. *Protection and Security*

   You shall take all reasonable steps to safeguard the Licensed Product and to ensure that no unauthorized person shall have access to it and that no unauthorized copy of any part of it in any form shall be made.

6. **Limited Warranty**

   If You are the original consumer purchaser of a diskette and it is found to be defective in materials or workmanship (which shall not include problems relating to the nature or operation of the Licensed Product) under normal use, S&S will replace it free of charge (or, at S&S's option, refund your purchase price) within 30 days following the date of purchase. Following the 30-day period, and up to one year after purchase, S&S will replace any such defective diskette upon payment of a $5 charge (or, at S&S's option, refund your purchase

price), provided that the Limited Warranty Registration Card has been filed within 30 days following the date of purchase. Any request for replacement of a defective diskette must be accompanied by the original defective diskette and proof of date of purchase and purchase price. S&S shall have no obligation to replace a diskette (or refund your purchase price) based on claims of defects in the nature or operation of the Licensed Product.

The software program is provided "as is" without warranty of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of the program is with You. Should the program prove defective, You (and not S&S) assume the entire cost of all necessary servicing, repair or correction.

Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to You. This warranty gives You specific legal rights, and You may also have other rights which vary from state to state.

S&S does not warrant that the functions contained in the program will meet your requirements or that the operation of the program will be uninterrupted or error free. Neither S&S nor anyone else who has been involved in the creation or production of this product shall be liable for any direct, indirect, incidental, special or consequential damages, whether arising out of the use or inability to use the product, or any breach of a warranty, and S&S shall have no responsibility except to replace the diskette pursuant to this limited warranty (or, at its option, provide a refund of the purchase price).

No sales personnel or other representative of any party involved in the distribution of the Licensed Product is authorized by S&S to make any warranties with respect to the diskette or the Licensed Product beyond those contained in this Agreement. **Oral statements do not constitute warranties,** shall not be relied upon by You, and are not part of this Agreement. The entire agreement between S&S and You is embodied in this Agreement.

7. *General*

If any provision of this End User License Agreement is determined to be invalid under any applicable statute or rule of law, it shall be deemed omitted and the remaining provisions shall continue in full force and effect. This End User License Agreement is to be governed by and construed in accordance with the laws of the State of New York.

REPLACEMENT ORDER FORM

Please use this form when ordering a replacement for a defective diskette.

A. If Ordering within Thirty Days of Purchase
If a diskette is reported defective within thirty days of purchase, a replacement diskette will be provided free of charge. *This card must be totally filled out and accompanied by the defective diskette and a copy of the dated sales receipt.* In addition, please complete and return the Limited Warranty Registration Card.

B. If Ordering after Thirty Days of Purchase but within One Year
If a diskette is reported defective after thirty days but within one year of purchase and the Warranty Registration Card has been properly filed, a replacement diskette will be provided to you for a nominal fee of $5.00 (send check or money order only). *This card must be totally filled out and accompanied by the defective diskette, a copy of the dated sales receipt, and a $5.00 check or money order made payable to Simon & Schuster, Inc.*

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

PHONE NUMBER ( )_____

PRODUCT NAME MAC ART DEPT.

ORIGINAL PURCHASE DATE_____

PURCHASE PRICE_____

COMPUTER BRAND_____ MODEL_____

Please send all requests to Computer Software Division, Simon & Schuster, Inc., 1230 Avenue of the Americas, New York, New York 10020; ATTN: Replacements

NOTE: Simon & Schuster reserves the right, at its option, to refund your purchase price in lieu of providing a replacement diskette.

54317-2

LIMITED WARRANTY REGISTRATION CARD

In order to preserve your rights as provided for in the limited warranty, this card must be on file with Simon & Schuster within thirty days of purchase.

Please fill in the information requested:

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

PHONE NUMBER ( )_____

NAME OF PRODUCT MAC ART DEPT.

DATE OF PURCHASE_____ PURCHASE PRICE_____

COMPUTER BRAND_____ MODEL_____

DOS VERSION_____ MEMORY_____K

Where did you purchase this product?

DEALER NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

How did you learn about this product? (Check as many as applicable.)

STORE DISPLAY_____ SALES PERSON_____ MAGAZINE ARTICLE_____ ADVERTISEMENT_____

OTHER (Please explain)_____

How long have you owned or used this computer?

LESS THAN 30 DAYS_____ LESS THAN 6 MONTHS_____ 6 MONTHS TO A YEAR_____ OVER 1 YEAR_____

What is your primary use for the computer?

BUSINESS_____ PERSONAL_____ EDUCATION_____ OTHER (Please explain)_____

Where is your computer located?

HOME_____ OFFICE_____ SCHOOL_____ OTHER (Please explain)_____

54317-2

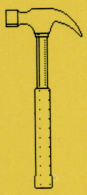
TURN YOUR MAC INTO A PROFESSIONAL ART DEPARTMENT

- **Do you find drawing with a mouse difficult?**
- **Do you have problems mixing graphics and text effectively?**
- **Do you find Macintosh clip-art products hard to work with?**
- **Do you want to improve your graphics abilities?**

FINALLY, CLIP ART BY A PROFESSIONAL ARTIST

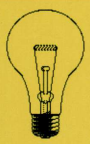
Created by a prominent designer and computer graphics artist, *The Mac Art Dept.* is exactly what the frustrated Macintosh owner needs. It contains a full disk of versatile, reusable graphics elements *and* a comprehensive manual with easy-to-follow step-by-step instructions. With them, you will be able to create simple yet elegant designs for reports, charts, correspondence...in fact, any printed material.

READY-TO-USE GRAPHICS FOR EVERY PURPOSE



The Mac Art Dept. disk contains over 150 graphic images, each one ready to be used as is or modified to fit your needs. Each image was chosen for its graphic impact and its usefulness in a wide variety of situations. The images include household objects (such as a camera, a radio, a bicybcle), travel images (boats, trains, cars), food (an ice-cream cone, a roast turkey), Americana, musical instruments, buildings, simple and ornate borders, fill-in-the-text signs, and much, much more.

CREATE NEW IMAGES FROM OLD—AVOID BAD DESIGN



The Mac Art Dept. manual is a comprehensive guide to using these images and creating striking graphics designs. It shows you how to create new images from old ones by modifying them, simply and easily, to suit your individual circumstances. Equally important, it gives pointers on how to mix graphics and type, and provides lots of good advice on how to steer clear of bad design.

PUT A PROFESSIONAL ARTIST INTO YOUR MAC

Tom Christopher, a highly regarded New York graphics artist, created the designs and wrote the manual for *The Mac Art Dept.* He is a contributor to *PC Magazine,* and his graphics and art have appeared in *People, Fortune, Motor Trend,* and other magazines, on NBC News, ABC Sports (including the 1984 Olympics), and on the covers of records from CBS and books from many major publishers.

Requires a Macintosh with a minimum of 128K and MacPaint.
Printer recommended.

Computer Software Division
Simon & Schuster, Inc.

0585 3995

$39.95

0 54317
76714 03995
ISBN 0-671-54317-2