

Make Your Own Burning Card

A useful tool for fine print control

Dodging and burning are creative printing controls, which are often necessary to emphasize certain areas of the image. A 'straight' print might show some areas too light, while others are too dark. Adjusting the overall contrast, in an attempt to capture both ends of the print scale, may give a 'weak' print. For a more expressive image, optimize the local contrast in areas of interest and tweak the shadows and highlights with dodging and burning techniques to their individual optimum.

Many experienced printers simply use their own hands to cover or direct the light path to certain areas of the image. Others prefer the use of purchased or self-made templates to achieve similar results. To dodge, I use a piece of cardboard, which is mounted to a thin piece of wire. Its shape is sometimes image dependent but, most often, it is just a small circle or rectangle. My burning tool is a self-made template, which is flexible enough to help me with almost all of my images. It only takes about an hour to make it, and I will explain later how it is done. But first, I'd like to show you a sample image where the self-made burning card came in handy (fig.1).

Silver Maple Leaf

This image was taken in my backyard in Farmington Hills, Michigan USA in July of 1997, at the end of a rainy day. The reverse side of a silver maple leaf is very bright and makes a strong contrast to the dark surrounding leaves. I fixed the Hasselblad 501C to my shortest Manfrotto tripod, which I originally bought because it fits well into my suitcase. In this case, however, it was ideal, because it allowed me to get close to the ground and this scene. The Carl Zeiss Planar 2.8/80 was mounted to the camera and the close-up filter permitted a focal distance



fig.1 Adjusting overall contrast with the aim of a 'straight' print is not always advisable. The expressive image often benefits from final printing controls like dodging and burning.

of about 60 cm. The camera back was loaded with Kodak's TMax-100 film, which I down-rate to EI 64 for normal development. I wanted detail in most of the dark background leaves and placed them on Zone III. The brightest parts of the leaf fell, consequently, onto Zone IX. However, I was hesitant to give N-1 development, because I was concerned about losing local contrast. I waited for the light breeze to hold for a moment and exposed at f/16 for 1 second. The negative turned out just as I

fig.2 The burning card has three layers, which are held together by a screw, a washer, and a wing nut. A red cardboard was chosen as the base material. It is light enough to see the projected image, but all reflected light is of a harmless wavelength for the photographic paper.

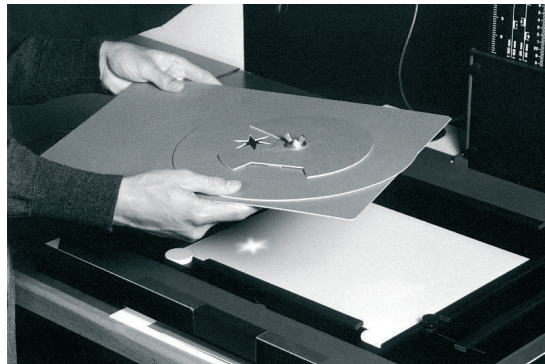


fig.3 The underside of the burning card is painted flat black to prevent any light from reflecting back to the paper. The bottom card has two holes, one for the center pivot and another for hard to reach areas in the corner of the image.

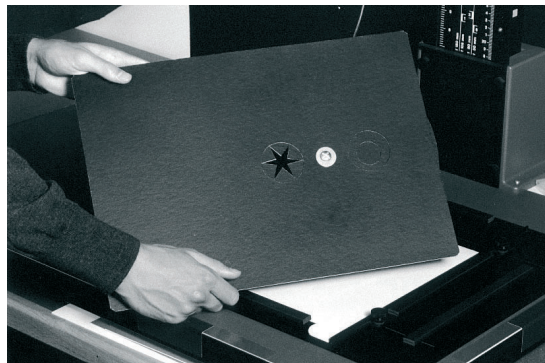


fig.4 The circular card in the center has several hole patterns to adjust the light path to specific applications. This light path can be further modified with the top card, by partially covering the chosen hole pattern. This way, many customized shapes are possible.



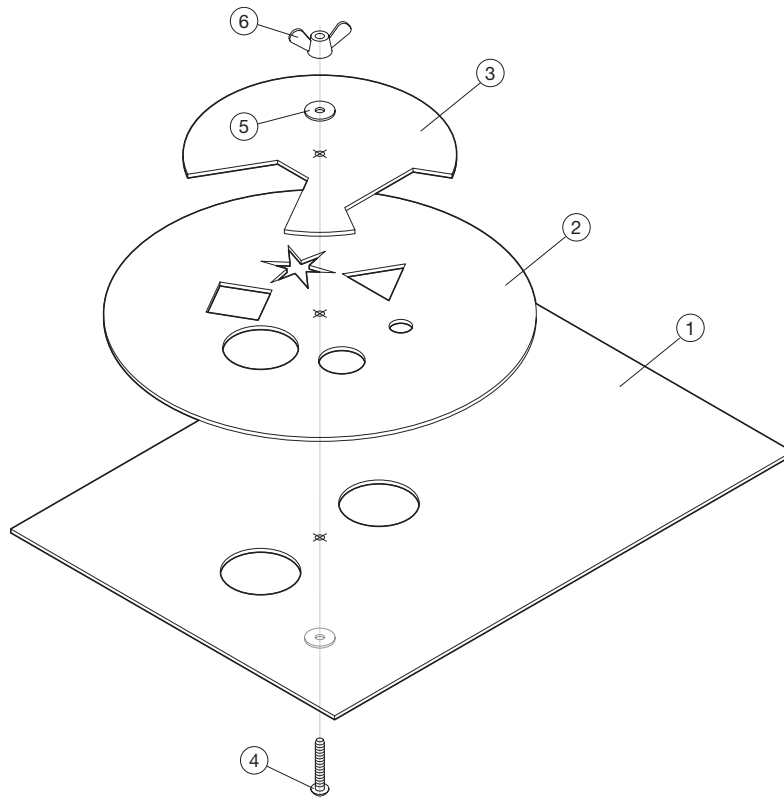
expected with most of the bright leaf being well into Zone IX. Again, I hesitated to lower the paper contrast to protect the local contrast. I settled for grade 2.5, accepting that the leaf would be too light on the work print. Most of the shadows were as I wanted them, but there was too much detail in some areas, which distracted from the leaf. These areas were burned down with 2/3 stop additional exposure. Then, I raised the contrast to grade 4 and added a burn-in exposure to the leaf until it had the right level of highlight detail. The increased paper contrast allowed the fine details of the leaf to appear, without turning the rest of the leaf into an unnatural dirty gray.

How It Works

Fig.2 shows the burning card, which consists of three cardboard layers, held together by a screw, a washer, and a wing nut. This makes it easy to unlock the cards, select the hole pattern of choice and then lock the cards together again to maintain a stable selection during the burning process. A cardboard stock, red on top and white underneath, was chosen as the base material. The red side reflects enough light to see the projected image clearly, but all reflected light is reduced to a wavelength harmless to the photographic paper. Fig.3 shows the underside of the burning card and how it is painted flat black to prevent any light from reflecting back to the paper. The bottom card has two holes, one for the center pivot and another for hard-to-reach areas in the corner of the image. Using the outside hole for corner-burns maintains light protection for the rest of the image. Fig.4 shows the center card and one of its several hole patterns, which are used to adjust the light path to specific applications. This light path can be further modified with the top card, by partially covering the chosen hole pattern. A half-moon shape is easily created by covering half of the circular hole, or a triangle is created by covering the square diagonally. This way, it is possible to produce countless customized shapes.

How to Make Your Own

Any art store sells sturdy poster board, such as I used for the burning card, in many sizes and colors. If you are lucky, you'll find the two-tone variety. The optimum card would be medium red on one



No	Part Name	Dimensions [in]
1	base plate	12 x 18
2	pattern disk	ø 11
3	modifier disk	ø 7
4	screw	ø 3/8 x 1/2
5	washer	ø 3/8 (large)
6	wing nut	ø 3/8

because the holes in the bottom card need to be able to reveal every hole pattern completely. You can do so using a drafting compass to mark a large circle with the fixing hole as its center. Now, place the center of every hole pattern, in even increments, along the perimeter of that circle. I'm sure you will enjoy having this tool.

fig.5 The exploded view and the basic dimensions of the burning card

side and flat black on the other. Otherwise, select the red board and spray-paint one side flat black, before you start cutting it. They are usually sold in DIN-A1 (2x3 feet) and that will be more than enough to make an DIN-A3 (11x17 inches) card and leave you with enough material to make a variety of small dodging tools. You can use the exploded view in fig.5 and the bill of materials as a rough guide for dimensions, but it is probably best if

you customize the sizes and the hole patterns to meet your own needs. Cut a cross-shape, rather than drilling a hole, where you want the screw to penetrate the cardboard. The extra material will help the screw to cut its own thread and make a more reliable fit. Use a large 'automotive' washer, because it will distribute the clamp force over a larger area and reduce wear. Make sure that all holes are on a centered path around the screw,

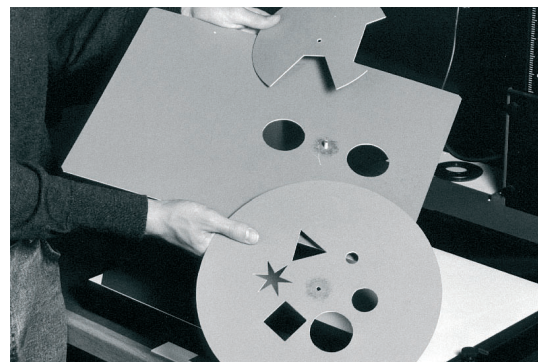
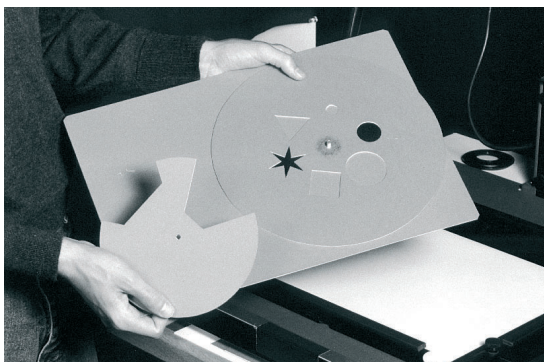


fig.6a-b The burning card is being disassembled. Only one screw holds the three cards in place and provides the pivot point for the hole pattern.