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On the contrary, buster; who steals my purse may be filching a highly collectible camera

Not long ago, New York photographica dealers Allen and Hilary Weiner acquired an unusual photographic item: a camera concealed within a ladies' purse. And even though unusual, this was a different kind of purse camera from one they already own.

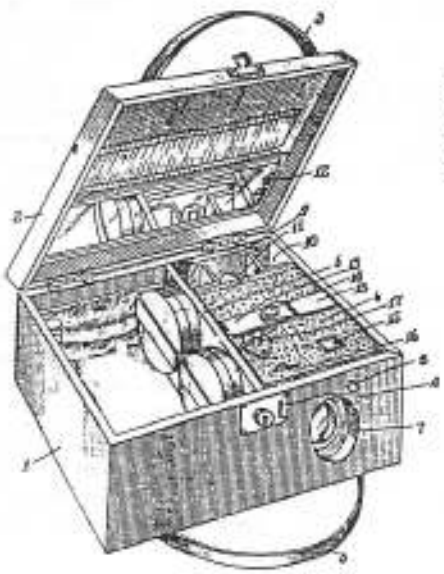
I first began to learn in detail about cameras combined with handbags, purses, and compacts in 1975-76, while researching a book on cameras concealed in a variety of disguises. This research, done with my co-author Michel Auer, turned up a dozen of this type of camera that have been patented and/or produced over the years.

The introduction of gelatino-bromide dry plates around 1880 had relieved the photographer of the fuss, mess, and weight of equipment needed for coating photographic "wet" plates just before exposure, and to develop them just after. This encouraged many women as well as men in the next two decades to take up photography.

In 1889, trying to appeal to this growth, C. Haglund, of Berlin, introduced his *Ladies Camera*, described as being "in most elegant fashion, a case in plush and leather, designed and suited for ladies to make instantaneous photographs" (snapshots). It cost 20 marks, and looked more like a traditional rounded-top lunchbox than anything else available today.

In 1890, */continued*

Sept. 9, 1924. M. GOLDSMITH 1,507,915



Maurice Goldsmith's 1924 patent served as the basis for Ansco's Photo Vanity, a vanity case-camera combination.

By Eaton S. Lothrop, Jr.

Time Exposure

continued from page 26

Charles Whitney, the imaginative American who designed the *Kamerette* camera, was granted a patent for a series of camera designs. Once such in this patent was for a camera in the shape of a "porte-monnaie" (a small purse). But there is no evidence that this camera was ever produced.

A year later, Ferdinand Servus, of Berlin, was granted a patent for a "photographic pocket camera." Although it was not suggested in the patent's title, the illustration showed it to be a collapsible camera with an internal wooden frame. It looked like a handbag—or, with modification, like a book!—with a leather cover or flap. There is no evidence that this camera was ever produced, either.

The British periodical, *The Amateur Photographer*, in its Feb. 19, 1892 issue, reviewed *The Purse Camera*, calling it "a neat little novelty." It commented, "Externally we have a very dainty-looking purse which any lady might envy us the possession of, and part of the interior is actually set apart for ordinary purposes, but a special pocket contains a little folding camera with fixed-focus lens which takes one-inch-square pictures. A safety shutter is provided, and exposure can be made by means of this or by the aid of the finger." The camera was sold by London's Dolland & Co.

The *Volapük No. II*, listed in the 1893 catalog of Bernhard Wachtl, of Vienna, was the same camera, to judge by the catalog illustration.

The *Pocket Book Camera*, which appeared in America in 1892, was advertised by Scovill & Adams Co. in 1894, at $3. Based on its description, it too would have been the same camera.

J. Lancaster & Son's *"Ladies" Camera*, advertised around 1896-97, was essentially a portable camera with folding tailboard and reversible back. Manufactured in three sizes (the smallest took 3¼x4¼-in. plates), the camera was of leather-covered wood and looked somewhat like a ladies' bag.

Unquestionably, the most exotic of purse cameras was the *Pompadour-Kamera* of 1906. It was designed by Adolf Hesekiel and marketed by the Certo photographic firm of Germany. Essentially, the Pompadour was a conventional drop-bed, folding-plate camera, for 6x9- or 6.5x9-cm plates, mounted within the U-shaped frame of a ladies' handbag.

The simulated handbag was made of brown imitation alligator hide and had silver-colored metal fittings and ornamentation. Some models had a green bellows, while others had a tan one. The camera had a chain handle and sold for 70 marks.

In his application of April 7, 1924 for a combined vanity and camera case, Maurice Goldsmith, of New York City, said, "It is my object to construct a case in which the camera can be secured and used to take photographs without removing it from the case."

The patent was granted in September of that year. And some time not too long afterward, the camera appeared as the *Photo Vanity*, marketed by the Ansco Corp., Binghamton, N.Y.

The carrying case had a seal-grain leatherette covering. When opened, the case revealed that three-fifths of its space was taken up by vanity items: powder, lipstick, compact, and comb. The remaining space held a small box-camera body that used 127 film. While the original patent called for the camera to be removable, it was not, in the finished product.

In 1925, Oscar Lending, a Polish citizen living in Brooklyn, was granted a patent for a "combined handbag and camera." Although its covering was rather different, its design was quite similar to the Photo Vanity.

In 1976, while doing research on my book, I spoke with Mr. Lending, who was still living in Brooklyn. He informed me that his camera had never progressed beyond the patent stage.

On Nov. 1, 1927, Joseph Napoleon St. Lawrence, of Grand Forks, N.D. was granted a patent for a camera carrying case that was "a combination camera box and vanity box." This was somewhat like Lending's and Goldsmith's patents, but used a folding-bellows camera. It seems never to have reached commercial production.

The camera I mentioned earlier in this column—the one acquired by the Weiners—was the *Ensign Hand-Bag Camera*. Based on the 1928 patent of Samuel Aspis, London, the camera was made by Houghton-Butcher.

Within a tan ladies' handbag was mounted a collapsible *Vest Pocket Ensign* camera. Lifting the flap of the bag revealed a mirror. Behind the mirror, which was mounted on a flap, was the camera. Its collapsible front could be pulled forward, locking into place with struts for picture taking.

Harrison Sterick's patent for a purse camera, granted Feb. 5, 1929, was for a clasp-topped, flexible handbag that had a camera mounted inside. Illustrated in the patent were the options of a box camera or a folding roll-film camera. This camera, too, was apparently never produced.

A purse for which I've been unable to uncover any information is another one owned by the Weiners, called *Fotonette*. Measuring 9½ in. long by 7¾ in. high, it is made of green simulated alligator hide and has a long, chrome-plated clasp. Peeping out through a small flap at the top is the front of a subminiature camera.

While many of the previously mentioned camera designs have considerable space taken up by the camera, the Fotonette uses very little space. It is marked "Made in Czechoslovakia" on its die-cast body. It produces 20x20-mm exposures on roll film and uses a two-stop 31-mm f/8.8 Frontal Periscope lens. I think it dates from the 1930s.

The last of this type of camera, and the only one to my knowledge to have been made after World War II, is the *Petie Compact Camera*, from Walter Kunik Vertrieb, Frankfurt am Main, Germany. This was a subminiature 16-mm Petie camera mounted in a special case.

The case was enameled, with gold trim, appearing in at least two colors: red and green. A door on the front, which had a mirror mounted on its back, covered a powder container and puff.

Two tubes were mounted in the top of the case. One held lipstick; the other carried a spare roll of film. Overall, the case was 4½ in. long, 2⅝ in. high, and ⅞ in. thick. The Petie camera had a 25-mm f/9 lens, and the outfit was manufactured in the mid-1950s. ○

TEST YOUR SHUTTER SPEEDS AT HOME

USING YOUR PHONOGRAPH MAKES IT EASY

BY DANKWART KOEHLER

If you ever wanted an easy way to measure your shutter speeds right at home, say, to within an accuracy of at least five percent, here is a good way to do it. The principle is very simple. Simply measure the blur of an object that moves with a well-defined and constant speed such as a record player. The simplest part is testing the slow shutter speeds up to about ⅛ second; but with a little bit of cardboard cutting and hole punching, speeds to 1/500 or even 1/1000 can be measured.

SETUP FOR SLOW SHUTTER SPEEDS

A flashlight is taped onto the turntable as shown in photo No. 1. With the turntable running at a constant speed, a time exposure is made for each shutter speed to be measured. Then from the angle of the blurred flashlight trace, the shutter speed can be calculated easily. You can measure the angle of the light trail either directly under the enlarger or, more leisurely, on a print that you may want to keep for your records. Here are a few hints and suggestions:

1. If your turntable allows you to vary its speed you may want to use the fastest possible speed for the shorter exposure times. For the examples shown here, I used 45 revolutions per minute.

2. The more the flashlight source resembles a point light source the higher will be your accuracy. I used one of those slide-show pointers and removed the front part, thus exposing the bare bulb. If you shoot for even higher accuracy you can cover much of the light bulb with black tape, leaving only a small hole for the light.

3. Since your object is a moving light you basically want to keep your f-stop the same for all shutter speeds. For measuring the angle of your light trail it will prove useful to have a record of the center point of the turntable; therefore it is advantageous not to darken the room completely. If you are a perfectionist you may want to increase this background light as you go to shorter and shorter shutter speeds,

1. For measuring shutter speeds between one and ⅛ second, flashlight is taped to phonograph turntable.

for example, by moving your studio lights closer.

4. If your shutter speed is longer than the time your turntable takes for one revolution (e.g. one-second shutter speed at 78 revolutions per minute) you get an overlap of the light trace. Unless you get more than one such overlap you should still be able to recognize the overlap precisely on the negative or print.

EVALUATING THE ANGLE OF THE LIGHT TRAIL

Evaluating the results is easy. Your flashlight has produced a light trail over some fraction of a circle and you can measure the angle with a protractor. Then you have to know how long it takes your turntable to go around once, i.e. for an angle of 360 degrees. Simply multiply the time for one revolution by the measured fraction n/360, where n is the measured angle of the light trail in degrees.

If you'd rather work with an equation and start with the number of revolutions per minute, here is what this means: Measured shutter speed in seconds = (angle in degrees ÷ by 360) × (60 ÷ by number of revolutions per minute). For example, for 45 rpm, the time in seconds is: Time = angle in degrees ÷ by 270.

For example, photo No. 2, made at a shutter setting of ¼ second and a turntable speed of 45 rpm, shows an angle of 68 degrees, and hence a true shutter speed of 68 ÷ 360 x 60 ÷ 45 = 0.252 second.

SETUP FOR FAST SHUTTER SPEEDS

The method described so far is useful down to shutter speeds of ⅛ or perhaps 1/15 of a second. Below that, the angle becomes too small to be measured accurately. For the shorter exposures we can use the blur of a moving mark on the perimeter of the turntable.

A cardboard is stapled together to form a cylinder that can be fitted tightly over the edge of the turntable as shown in photo No. 3. Care must be taken that the turntable moves freely without additional friction. It is advised to verify this by counting the number of revolutions per minute.

On the cylinder we draw periodic marks which will record later as measurable blurs when the turntable is in motion. I achieved the best results piercing and punching holes into the cardboard and illuminating them from a simple utility light hung inside the drum and suspended from the ceiling. You can see this in photo No. 3. Again, the light must not touch and slow down the turntable. In fact, be careful not to touch the top of your turntable with too close and too hot a light.

In choosing a pattern, one must keep in mind that the length of the blur will range from a fraction of an inch for short exposures to several inches for a longer shutter speed, for example about four inches for ⅛ second at 45 rpm. I chose my markers so that they correspond to 1/100 second. At 45 rpm one needs 133 markers around the perimeter. In my case they were ¼ inch apart. These markers are then appropriate for measuring shutter speeds of 1/250 or 1/500 of a second. For 1/100 of a second or slower, the trails from two adjacent markers might merge. Therefore we need markers that are spaced further apart. Photo No. 4 shows the pattern I used. The diagram is a sketch of what I would consider an ideal minimum pattern.

TEST YOUR SHUTTER SPEEDS AT HOME

You don't have to cover the entire perimeter of the drum with markers but only about half or even one third, since you can trigger your shutter when the pattern comes around. Obviously you can trade off homework for an occasionally missed picture and thus more film. I used needle-point holes for the small markers. Such holes may be a little too small for the longer shutter speeds, in case the camera is moved farther away or if the rear illumination is not sufficiently uniform over the entire trail. Triangle or arrow shapes, pointed up or down, would be really ideal but they are not as easy to make as round holes.

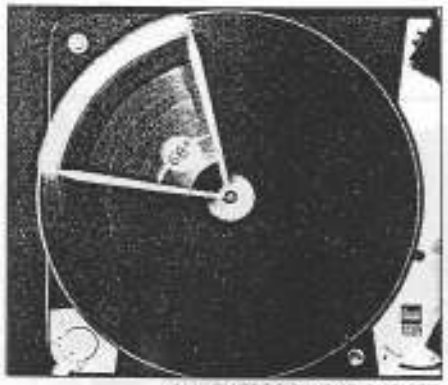
EVALUATION OF RESULTS FOR THE FAST SHUTTER SPEEDS

The first step is to calculate the time that corresponds to the passage of the two marks used for the respective test. It is simple arithmetic. In terms of an equation we can say: Passage time between two marks in seconds equals the total number of holes around perimeter × revolutions per minute divided into 60; or passage time equals (Spacing between two marks × 60) ÷ (3.14 × the drum diameter × revolutions per minute). For example, at 45 rpm and 133 holes, the time is 0.010 seconds, or, stated differently, 1/100 of a second.

Photos No. 5, 6, 7 and 8 correspond to shutter speeds of 1/500, 1/125, 1/25 and 1/8 second.

Once you know the elapsed time between the passage of two marks, you measure in your photograph the length of the blur and divide it by the length of the marker spacing as measured on the same photograph. This calculated ratio is then applied to the time that we know passes between the passage of two marks. For example, in photo No. 7, the blur is 70 percent of those marks that are 0.05 seconds apart. Hence the measured shutter speed is 0.035 seconds, or 1/28 of a second for a nominal 1/25 shutter speed.

For those seeking perfection, here are two additional remarks: To account for the finite size of the hole, we should subtract the width of the trail from the length of the trail when the latter is measured between the extreme ends. Secondly, as we move in our evaluation to the longer shutter speeds, i.e., if the trail corresponds to more than two or three inches on our drum, we experience distortion from the curvature of the drum. We can



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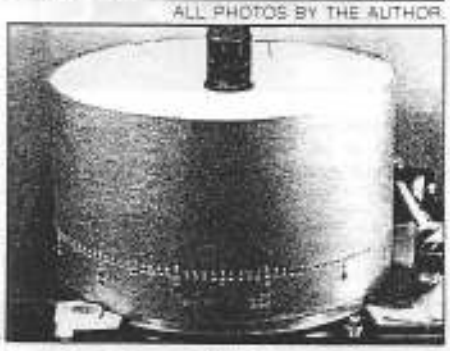
ALL PHOTOS BY THE AUTHOR



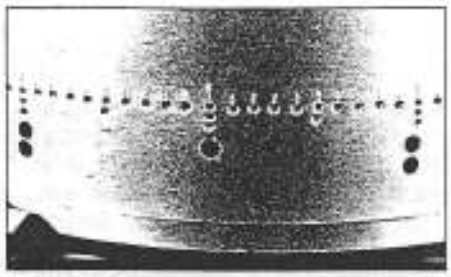
3

theretore expect better accuracy in these cases from the moving flashlight method. Yet, at ⅛ second, I still obtained perfect agreement between the two methods.

THE HANDWRITING OF FOCAL-PLANE SHUTTERS

The photographs shown up to this point were all taken with a between-the-lens shutter, but the measurement procedure and analysis are equally valid for focal-plane shutters, provided we do not move in too close when taking the photographs.

If you expose an object for 1/500 second with a focal-plane shutter rather than a between-the-lens shutter, your shutter opens like a curtain; it takes about 1/60 to 1/30 second for this curtain to move across your film plane. A second curtain follows 1/500 second later, moving at the same speed to close your shutter. While these shutters move quite slowly, every element of your picture gets exposed to light for only 1/500 second in this case; yet an element at one end of the film frame is exposed 1/60 to 1/30 of a second later than an element at the other end. Knowing this fact, you can stretch out or shrink objects that are moving very fast. (Mathematically speaking, the stretching factor is 1÷(1−ts÷to), where ts is the time the shutter takes to move across the film



4

2. Moving flashlight leaves circular trace whose angle can be measured. From this, true exposure time can easily be calculated. At 45 rpm turntable speed, we measure 68 degrees, or .252 second for the ¼-second setting.

3. For test shutter speeds, a cardboard sheet is stapled into a drum, and periodic holes are punched out in it. Drum is mounted on turntable, and utility light hung into drum (without touching drum or turntable) to illuminate holes.

4. Close-up of marking pattern used by author shows small holes used for fast shutter speeds, and larger holes used for longer shutter speeds.

5. Photograph of moving backlit holes. Ratio between trail length and mark spacing (22 percent here) is multiplied by amount of time that passes between two holes (.01 second), to get actual shutter speed (1/450 second here).

6. Here trail is 86 percent of distance between marks that are .01 second apart, so shutter speed is 1/120 second.

7. Here trail is 70 percent of distance between marks that are .05 seconds apart, so shutter speed is 1/28 second.

8. Here trail is 65 percent of distance between marks that are .2 seconds apart, so shutter speed is 1/7.7 second, very close to set speed of ⅛ second.

9. Stretching (9A) and shrinking (9B) of fast-moving object by focal-plane shutter appear when object is moving in same direction as shutter (9A) and in opposite direction (9B). The blur-to-marker spacing ratio is unaffected by this effect. Exposure setting in this example was 1/250 second.

10. Author recommends turning camera 90 degrees to eliminate stretching/shrinking of marks. In this photo, also taken at 1/250, focal-plane shutter movement shows up as tilt. If camera is not too close to subject, tilt is small and evaluation procedure is unaffected by it.

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plane and to is the time it takes your projected object to move across the film plane. To describe shrinking, the minus sign changes into a plus sign in the equation.)

Photo No. 9A shows this stretching effect on our marker pattern for the example in which the turntable moves

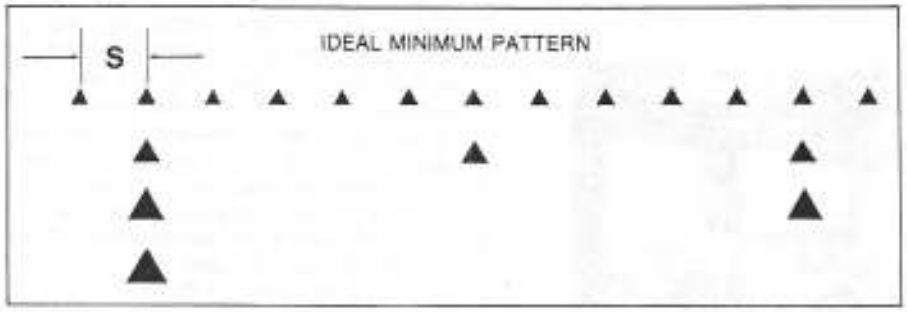
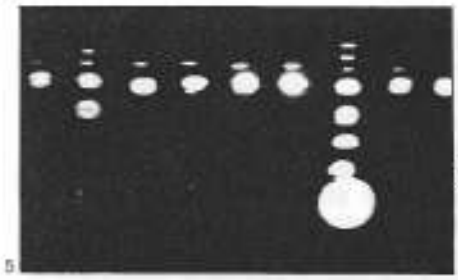


Diagram shows the ideal pattern, somewhat simpler than the one actually used by author. Triangles, as shown, are optimal, but circles are easier to make. Shortest spacing (S) should correspond to about five times the shortest exposure to be measured.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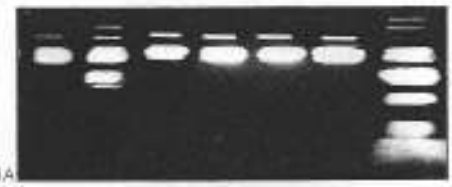
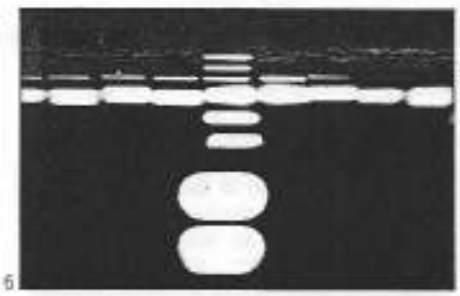

9A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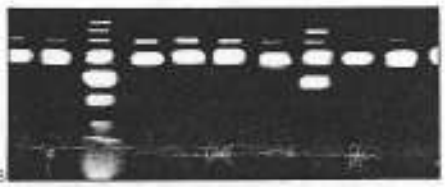
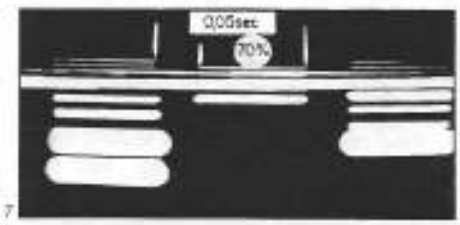

9B



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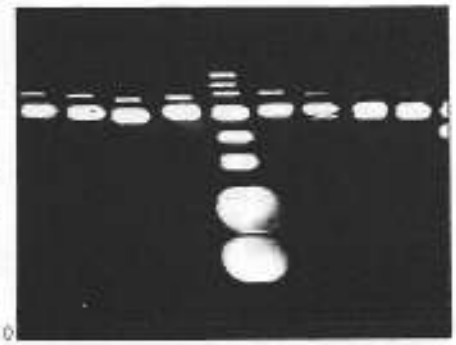
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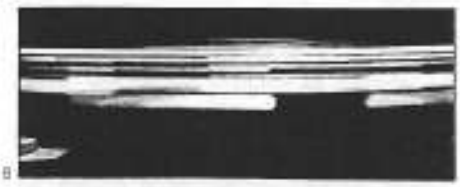
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in the same direction as the shutter, and photo No. 9B shows the shrinking effect if the movements are in opposite directions. It can be shown mathematically that if the shutter curtains move with a steady speed, the blur is stretched or shrunk just as much as the picture of the object. Hence the ratio between the two, which we used for our measurements, is unaffected.

Now here is the warning: Do not move in too close. You don't want to have in your viewfinder's field of view more than about 1/10 second worth of movement, e.g. ten markers of 1/100 second spacing. If, for example, your object moves as fast across your film plane as the shutter (ts = to), stretching becomes unlimited. If you are closer, your image even reverses.

We also have another alternative, which is the one that I would recommend. Turn your camera 90 degrees so that the shutter moves perpendicular to the turntable; for most cameras this means vertical format. Now you simply get a tilt instead of the stretching, as seen in photo No. 9. This tilt increases as you move in closer. It is 45 degrees if your object speed equals your shutter speed in the film plane. But again, we should not move in too close, otherwise your circles become ellipses and you lose accuracy. The angle of the tilt does not change with your shutter setting. I recommend to move in not closer than seeing enough markers in the viewfinder to cover about 1/20 second (e.g. five markers of 1/100 second). You can always blow up your picture in the darkroom to measure your results accurately. □

Naturally, the accuracy of your shutter-speed check is dependent on the accuracy of your turntable's actual speed. Just because you set it at the 45 rpm setting doesn't necessarily mean that it is turning at 45 rpm, especially if it is a bit on the old side and hasn't been serviced regularly. Some turntables have built-in stroboscopic speed-checkers. If yours doesn't, you can use this inexpensive Radio Shack Record Multi Speed Strobe Disc (Catalog No. 42-269), to check your turntable's speeds. Just put the disc on the turntable, and watch the appropriate band for the turntable speed set on the phonograph. If the speed is correct, a ghost image of the bars in the band will appear to stand still. If the turntable speed is too fast, the ghost-image bars will appear to move clockwise. If the turntable speed is too slow, the ghost-image bars will appear to move counterclockwise.

It's easiest to see the ghost-image bars under fluorescent lighting, but you can use the disc under regular light-bulb lighting, as well.

If the strobe disc shows that your turntable is running too fast or too slow, adjust the speed until the ghost-image bars appear to stand still. If you can't adjust the turntable speed, take the phonograph in and have it serviced—in addition to being able to check your shutter speeds accurately, your records will sound better for it.—MS

Paul R. Farber

Blemishes & Blotches, Beware . . .

Photography! It remains, even to this day, one of my basic fascinations. I know of no other art form that allows for so much investigation, exploration and creativity. Yet, despite all of the options allowable, I am forever bemused and even bewildered by the fact that so many photographers do not take the time to explore outside of their immediate interests.

For example, if one is working in color, then black-and-white remains unexplored, and vice versa. Or, if 4 × 5 is what interests the individual, then 35mm becomes a foreign expression not worthy of investigation.

Another field that bewilders many photographers is retouching. Many photographers will willingly throw away a photograph just because of a blemish or blotch that was beyond the ability of the photographer to cope with. That's a waste of time, effort and materials, in my opinion.

There are any number of options available to correct a print or negative (even a transparency) that will enable one to salvage a potentially good print with very little effort. One of these products, made for correcting color prints, is worthy of your time and the little effort involved. It is called "McDonald Basic Retouch Kit," and I suggest its use, particularly if you're into color printing. It will allow even the rankest of amateurs to make many corrections that will rival the work of professional retouchers.

The kit consists of several simple items. First, you get some special crayon pencils—pencils that match most of the colors you deal with in color prints—plus two cans of special spray—one for giving the print a "tooth" and the other for protecting the finished work. Additionally, an eraser is provided to clean up mistakes or overretouching (a common error with beginners—overretouching, not mistakes). Oh yes, the last item is a brilliantly written and illustrated instruction booklet that details the hows and whys of retouching color prints.

To begin, as an example, you have a color print of your Aunt Hattie (remember her? She was the one who was "so thrilled" to have a photographer in

the family), and it reveals the fact that your lens is mercilessly sharp. Every wrinkle, every year of her life is sharply etched into the color print. What to do?

First, you lightly spray the surface of the print to give it a retouching "tooth." After spraying, the print is allowed to dry for several minutes. Then you take an appropriate crayon pencil, sharpen it to a fine point (hopefully, it will match the color you are retouching), and then, carefully, you simply pencil out the offending lines, wrinkles and other tributes to your ultrasharp lens.

The instruction booklet is very clear and graphic in its directions. Even, as stated before, a true beginner can correct a color print with very little effort. No particular artistic ability is needed. There is really no good reason to throw away a print, just because of a minor fault that was believed to be beyond correcting.

The Prismacolor pencils, eight in all, represent most of the colors you may need. Other Prismacolor pencils can be bought for special color correcting problems that may be outside the ability of the pencils included with the kit. In any event, once the retouching is accomplished, the print is given a final spray with McDonald Pro-Tecta-Cote to protect the work, and that's all there is to it. A simple problem, simply solved.

I first came across the product at one of the photo trade shows, and I must admit that I was very impressed when I watched Mrs. McDonald take a color print, divide it in half lengthwise, and proceed to retouch one side of a portrait in a matter of a few minutes. It looked easy—too easy—and so I asked Mrs. McDonald if I could try it. She graciously allowed me to give it a whirl, and I was amazed at how wrinkles and blemishes disappeared right before my eyes. Believe me, if I could do it, then anyone can do it!

The McDonald color kit is not only for correcting minor portrait blemishes. It can also be used in any number of additional ways. For example, suppose you've come across a print of some fall foliage. It is a good print, but it lacks punch in terms of color and color saturation. Using the McDonald kit you can add color highlights to dull areas, and you can even add color where there is none. With a little work, your once-dull print of fall foliage will now sparkle with all the color you want.

Suppose you have another print, again a scenic with some clouds in the sky. However, the print seems to lack sparkle. So, using the kit, you simply add some color highlights to the clouds, picking up some of the colors in the scene as your guide.

Enhancing sunsets or sunrises is a snap, as is the ability to remove or enhance details in a color print, such as obtrusive telephone wires (which, magically, seem to appear from nowhere in your print, but were clearly missing when you made the exposure). Stray hairs in a portrait can be subdued to virtual nonexistence. Frankly, there is no limit to what can be done with a little patience and care on the part of the user.

Your local camera store should have the product in stock. If not, you can write to McDonald International, Inc., 11211 Gemini Lane, Dallas, Texas 75229 for more information on the product and where to obtain it in your area. There is no doubting the ability of anyone to improve his or her color prints with a little easy work and some well-spent time. And, given the current prices of color printing chemistry and paper, at $17.95 the price of the kit represents a small investment in ensuring a higher percentage of return in quality color prints. For the amateur or the professional, McDonald's color retouching kit is a must in any color darkroom. Believe me, it will be a "must" in my darkroom. Thank you, Mrs. McDonald, for this fine product. □