

What to do with Dichroic Silver.

The bane of Photo Archive's & Restorers.

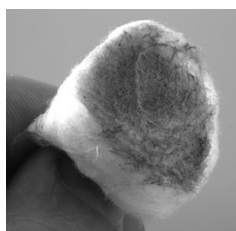


Dichroic silver is a 'growing migration' of silver crystals that deposit on the surface of photographic prints, 60 or more years old, as the 'decaying' silver of the photographic image slowly starts to revert chemically to silver crystals. It forms a hard and very reflective surface that masks the normal contrast of any photo. And because it is highly reflective also creates quite a problem for those who have to copy the images, Especially when scanning.

I have read many articles on the plethora of methods

photographers have used to scan such images, and the hours of agony Photoshop users have endured to restore images, that in many cases are often quite OK under that silvery veil.

One old trick is to mask the diachroic reflection, is to coat the surface of the photo with Vaseline, which as you can see from photo 1, has a very dramatic change in the reflectivity of that veil.



Only a minute amount, enough to fit on a cotton bud head, is enough to fix a postcard or half plate image.

The reason for the Vaseline is simple. It is neutral (won't grow bacteria or mould), does not 'wick' into the paper base (as mineral oils would do) and is also easy to remove (with suitable solvents).

BUT, and here is where the warning comes in ("Danger, Will Robinson..."), it can only be used in certain circumstances. The image MUST be any type of Silver Bromide or Chlorobromide.

It can NOT (repeat Not) be used on POP paper (Print Out Paper), or photographic images that do not have a sub-strata

such as Opalotypes, and that means almost all Photographic processes prior to the Mid 1890's. And NEVER ever use if any part of the prints emulsion is flaking or peeling off, or if there is any 'salting (from improperly washed hypo), as these WILL result in possible emulsion damage to the actual image. You will note that in photo 2, some of this silver actually comes off the print. Also, never use this method if the emulsions has very fine 'micro' cracks, as it will w'wick' into the paper, and end up making fine dark lines. Never allow it to run over the edge image onto the back of the print, as it will also wick into the paper, and result in dark areas.

Once applied, the secret is to spread it so thin that you have almost removed it all from the print. (Tip) if the print is mounted, do not spread it beyond the edge of the print, and 'mask' of the image to stop that happening, DO NOT use masking tap to protect the mount board. USE Post-It notes, whose adhesive is strong but will not peel off paper, or card, or even photo (if you aim is not good).

Disclaimer. I have over 30 years in copy & restoration (*and collecting*) old images, and the acquired knowledge of that has allowed me to 'intuitively know' which situations and photos these methods will work on. If in doubt, please try this on a corner of the Print, and remove with solvent (Shelite or Turpentine) if it does not work. *NEVER use Methylated spirits on any photo. The white scum that appears when it dries is Naptha crystals, and they can, like unwashed hypo, crystalizes out IN the photo's emulsion, and damage it.*

USE THIS TECHNIQUE AT YOUR OWN RISK, as I take no responsibility for any damage by its misuse on any inappropriate photographic emulsions.



Before & After. While it has not totally eliminated the silvery refelection, is has helped restore most of the contrast, and Photoshop work from this point on will restore this image far more than anyone could from the original.