One persons experience - The Laundry as a Darkroom

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With a change of house after 30 years, I found myself without a darkroom for the first time in 50 years. To get back into film processing after a 10 year love affair with digital, the following is my minimalist approach.

Equipment and Chemistry

- ***The Laundry is often the most convenient room in the house***. A single window that can be made light tight with a sheet of black builders plastic and the door sealed with a draught stopper. If you process at night, with all local lights off may be all you need. I processed late at light to allow this without disturbing management. A tall cupboard provided a place to hang the processed film for drying and two clips to hang and weight the film.
- Another advantage of the laundry is the stainless steel sink. Some developers, even when highly diluted, can result in stains that are difficult to remove. Working in the sink makes the task of cleaning up easy to manage and ensures that after washing the film with large volumes of water, the small quantity of chemistry discharged to waste is highly diluted.
- ***For 35mm and roll film (120), the Paterson tank is almost perfect.*** I selected a taller (1 litre) version to allow multiple films to be processed ***or*** high developer dilutions to be used (discussed later)
- If used recently, ensure the nylon spiral (film carrier) is dry. The method used to introduce the film into the spiral can be challenging if the unit is wet (even slightly)
- To control the temperature of the development stage (important), I would strongly ***recommend a dial type thermometer***. Mercury in glass thermometers while potentially more accurate, are a hazard worth avoiding. In my 40 years of laboratory experience, broken mercury thermometers were seen as major hazard and are best avoided in the home.
- After many years of experimentation (without much benefit), I standardised my processing on ***Agfa's 100+ year old formula Rodinal***. This is a "One Shot" developer and suited my erratic processing needs. A few films on one day and perhaps a few months till the next. It is cheap and keeps very well.
- The rinse step sometimes asks for an acid stop bath. I have not used one for film processing and find clean water is fine. If you want to include this step with an acid rinse, a few drops of "White Vinegar" works well.
- To remove the unexposed Silver Halide in the emulsion, a fixing salt solution is needed. Since this is also used in paper processing, a reusable solution of ***"Hardening Fixer"*** is most commonly used.

In summary

1. A Dark Room
2. Paterson Tank and Spiral
3. Dial Thermometer
4. Film Developer
5. Film Fixer
6. A clip (2) to hold the film during drying.
7. A dust free place to hang the film
8. Film negative storage sheet

The Process

1. ***Loading the film into the spiral*** can be a challenge at first and I would recommend using a length of old film in daylight as a practice run (try a few times) until a confident action is achieved. The club has old film suitable for this.

   When loading the film (35mm for this discussion) the type of film cassette should be noted. Most of my work is with commercial film loaded into crimped cassettes. These are not re-useable so I found it convenient to peal open the cassette (in the dark) at the film gate. Retrieve the film leader and trim off the tapered end. Ensure the cut is between the perforations. If you cut through a perforation, the loading mechanism in the spiral can be a problem.

   Make sure the tank lid is properly secured. In my tanks, a soft plastic sealing ring is included to avoid spills when the tank is inverted. Note 1.

2. ***Establish your developer solution***. In my example with Rodinal, measure 10ml of the concentrate and dilute with 500ml of water at 20C. This results in a 50:1 solution suitable for most B&W films. Pour the solution into the sealed tank, place the cap tightly and invert the tank a few times

   For a typical film, 10 minutes development time with a full inversion every minute is a good starting point. Better still, look up the WEB for a table of times for your developer and film.

3. ***Empty the used developer down the sink*** and rinse with 20C water.

4. ***Establish your Fixer solution***. This is not film specific and should follow the instructions on the fixer concentrate container. Temperature is now less important but 20C is good practice. After an inversion or two, the lid can be removed and the fixing process observed. My practice is to have the film clear (milky white to clear film base) in a few minutes. Continue the process after clearing for the same time again with agitation. When complete, pour the fixer into a container. The fixer can be used for future films (a week or more) or used for fixing paper.

5. ***Fill the tank with clean water and discard several times***. Thorough washing is a good investment in negative longevity.

6. ***Remove the spiral from the tank and tap on a clean towel several times to remove as much free water as possible.*** Remove the film from the spiral and place a clip on each end of the film and hang in a clean, dust free place overnight. The bottom clip will act as a weight and keep the film straight while it dries.

The Next Steps

1. Cut the film into strips to fit a good quality storage sleeve.
2. Scan then negatives for initial assessment (optional)
3. Print as required.

Note 1. Patterson tanks have a plastic tube on which the film spiral is located (important for light tightness). Ensure the spiral is at the bottom of the tank and not free to move. On longer tanks (my preference), the film could come out of the developer if the spiral is loose and result in a novel result. If loose, cut a piece of poly pipe to act as a sleeve and constrain the spiral to the bottom of the tank.