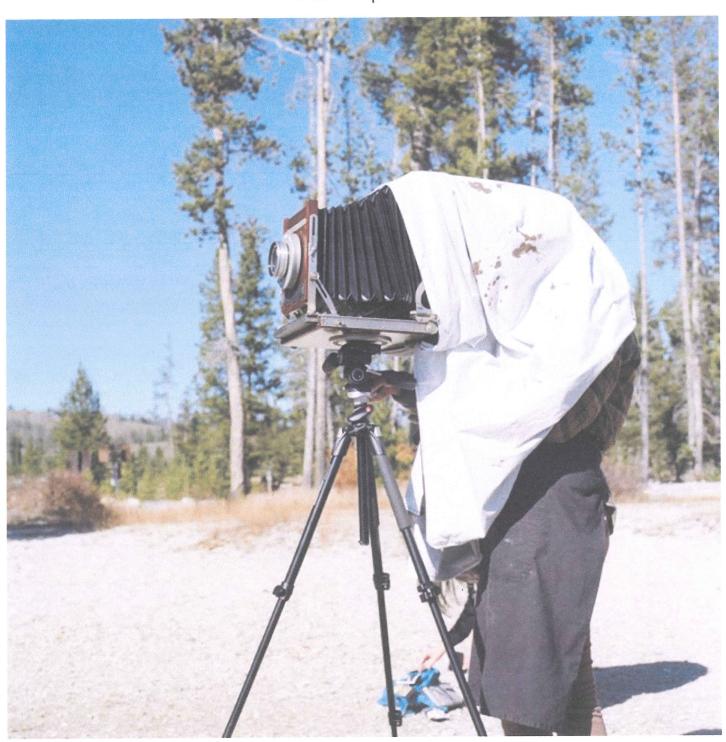
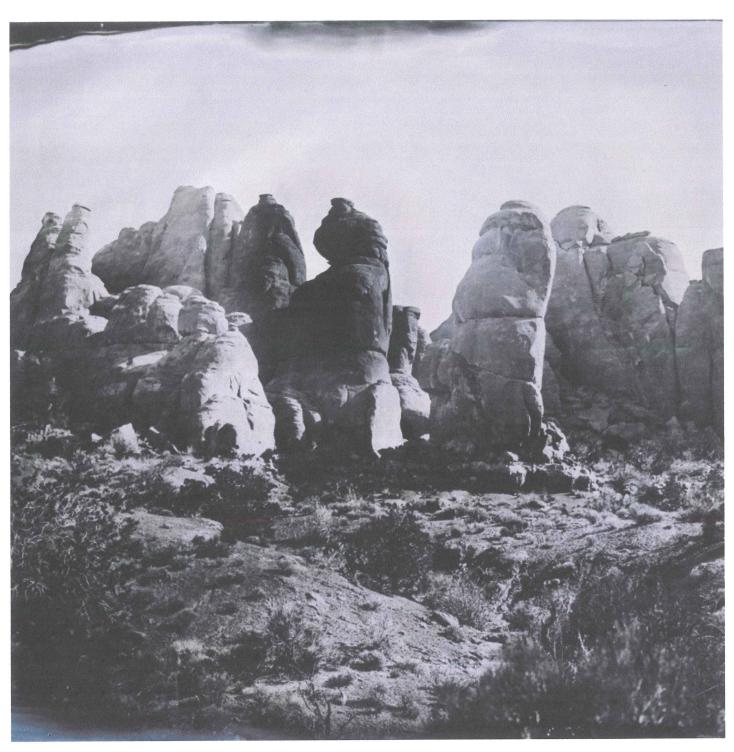
Tin Type Workshop 2014 "trust the process"

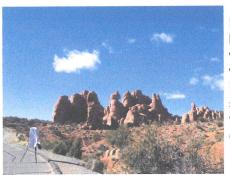








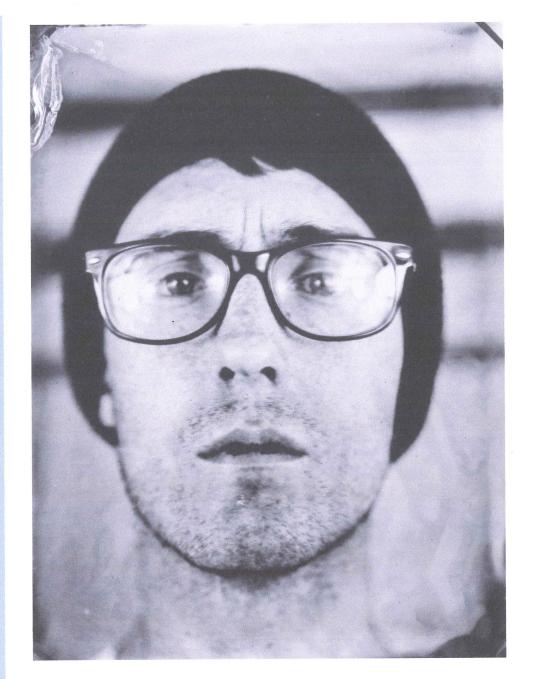




In the field making tin types at Arches National Park in Utah. Nice high sun with no cloud coverage my exposure was 6 seconds @ F-16 I developed my tin for 30 seconds stopped with water & then let it sit in a water bath for 5 minutes, agitating every 30 seconds. Sun dried the plate.



## **HOW I STARTED**









Collodion & Bromo Iodizer



Silver Nitrate (Silver Bath)



view from camera upside down & reversed!



pouring collodion onto a piece of tin!



Ferrous Sulfate (Developer)

## HISTORY OF WET PLATE PROCESS OR COLLODION PROCESS

"wet-collodion process, also called collodion process, is an early photographic technique invented by Englishman Frederick Scott Archer in 1851. The process involved adding a soluble iodide to a solution of collodion (cellulose nitrate) and coating a glass plate with the mixture. In the darkroom the plate was immersed in a solution of silver nitrate to form silver iodide. The plate, still wet, was exposed in the camera. It was then developed by pouring a solution of pyrogallic acid over it and was fixed with a strong solution of sodium thiosulfate, for which potassium cyanide was later substituted. Immediate developing and fixing were necessary because, after the collodion film had dried, it became waterproof and the reagent solutions could not penetrate it. The process was valued for the level of detail and clarity it allowed. A modification of the process, in which an underexposed negative was backed with black paper or velvet to form what was called an ambrotype, became very popular from the mid- to late 19th century, as did a version on black lacquered metal known as a tintype, or ferrotype" -
Encyclopedia Britannica

### THE PROCESS OF MAKING A TIN TYPE

- · Clean or peel off the plastic covering on an aluminum plate
- In the light, pour "salted" (<u>iodide</u>, <u>bromide</u>) collodion onto the glass plate, tilting it so it reaches each corner. The excess is poured back into the bottle.
- Take the plate into a <u>darkroom</u> (the plate is sensitive only to <u>blue</u> light) and immerse the plate in <u>silver nitrate</u> sensitizing bath (for 3–5 minutes)
- Lift the plate out of the bath, drain and wipe the back, load it into a plate holder and protect from light with a modified film holder.
- Load the plate holder into the camera, withdraw the <u>dark slide</u> and expose the plate (can range from less than a second to several minutes)
- Develop the plate for 30 seconds (using a <u>ferrous sulfate</u> based <u>developer</u>)
- Fix the plate for 4 minutes (with <u>potassium cyanide</u> or <u>sodium thiosulfate</u>)
- Rinse the plate in running water for 10 minutes
- Let plate dry in well ventilated area for 24 hours
- Varnish Plate

(info obtained via wikipedia modified by kendra for workshop)

## INSPIRATIONAL WET PLATE PHOTOGRAPHERS

Sally Mann

John Coffer

Mark Osterman

Jill Enfield

Ian Ruhter

### **GREAT BOOKS TO READ ON COLLODION PROCESS**

-Silver Sunbeam

-The book of Alternative Processes by Christopher James

### **MATERIALS NEEDED**

Safety Glasses

Latex Gloves

Paper Towels

Dr. Bronner's Liquid Soap

5 gals of water or running water near by

4-developing trays

Red Light (I use safety red lights)

Lab Beakers

Egg timer

All necessary chemicals

Dark Tank for Silver Nitrate

Black tin

Modified Film Holders

Apron

## **TROUBLESHOOTING**

Problem:

Solution:

Plate is too Dark

Exposure is not long enough

Plate is too Light

Exposure is too long

Plate has pinholes in it

Collodion has been shook up

Thick yellowish edges

Collodion was poured too thick onto plate

Blue patches on plate

Collodion was poured too thin onto plate

# WAYS TO KEEP TRACK OF EXPOSURE

- Collodion doesn't have an ISO so taking notes on weather, time of day, & lots of practice will make you aware of exposure
- always developed your plate for 30 seconds, less variables the easier it is to pinpoint the problem & fix it
- Collodion is UV light sensitive, it doesn't see green well & red, yellow, amber will photograph black
- Make mistakes, learn from them & listen to your heart the wet plate process is very much so a personal journey!

LOCATION:		
DESCRIPTION OF TI	ME OF DAY:	
DESCRIPTION OF SU	JBJECT:	
ADDITIONAL NOTES		

PLATE #	F STOP & TIME	COMMENTS
ie girl with flower	f 6 @ 3 sec	nice contrast, full sun

CHECKLIST FOR PORTABLE DARK ROOM:					
COLLODION-SILVER-DEVELOPER-FIXER-5 GALLONS OF WATER					
PAPER TOWELS-LATEX GLOVES-SAFETY GLASSES-DR BRONNER'S SOAP					
FOLDING TABLE-DARK CLOTH-SAFE LIGHT-GAFFERS TAPE					
4 TRAYS	DRYING RACK	EGG TIMER			
CAMERA-TRIPOD-MODIFIED FILM HOLDERS-NOTEBOOK-PEN					

# NOTES ON TIN TYPE WORKSHOP