DALE BERNSTEIN'S CHEMICAL ATTRACTION

For the love of making Wet-Plate Collodion Portraits

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DALE BERNSTEIN UNCORKED A BOTTLE CONTAINING A SOLUTION OF PUNGENT ETHER, alcohol, and collodion (pronounced *ke-lo-de-en*, as in "nic*kelodeon*"). The mixture includes trace amounts of cadmium bromide, ammonium bromide, potassium iodide, and a bit of water. (He says he barely notices the smell.) "I've never passed out from it, but I am more laid-back," he says with a wry smile.

Slowly he pours a liquid ribbon of the concoction onto a 6.5 -by-8.5-inch blackened aluminum sheet. Steadying the thin metal plate by holding only its edges, he gently tilts it side-to-side until its top surface wears an even coat of the solution.

Off to one side of his third-floor studio in the Stutz Building, Bernstein's workspace could be a scene from *Breaking Bad*. On top of and beneath folding tables sit hand-labeled glass and plastic jugs and bottles of potions, along with funnels, tongs, trays, and thick rubber gloves.

Unlike Walter White, Bernstein is neither a meth-cooking drug lord, nor a promising chemist. A well-known commercial photographer in Indy since the early'90s, Bernstein started out in New York, working for some of the most renowned contemporary photographers, including Irving Penn, Richard Avedon, Horst P. Horst, and Robert Mapplethorpe. Yet, it was Carleton Watkins' photos taken in 1867 along the Columbia River that ignited his wet-plate passion. "Seeing those photographs changed the direction of my photographic pursuits," he says.

"I'm fascinated by the science of this; it amazes me that someone was able to come up with formulas for this and work out all the problems by bringing together these disparate elements to make a photograph," Bernstein says. "As far as chemistry goes, I was a miserable failure at that in school, but I'm able to follow recipes."

It helps, too, that he's been at this turn-of-the-century-style photography for 20 years. He uses the same chemicals the photographers did in 1851, when the technique was invented. Wet-plate collodion is any process that uses collodion while it's wet. "The technique is 'wet-plate collodion,' and I make tin types using it," he clarifies. "If the same process is done on glass, it's an ambrotype; if a photographer makes a negative on glass and then makes prints from that, those are wet-plate collodion glass negatives."

Continuing his demonstration, Bernstein places the treated metal plate in a tray and

lowers it into a narrow vertical box, containing a bath of silver nitrate solution. "When the collodion I flowed on the plate comes in contact with this, it creates a light-sensitive emulsion," he explains. "Taking the picture exposes the plate."

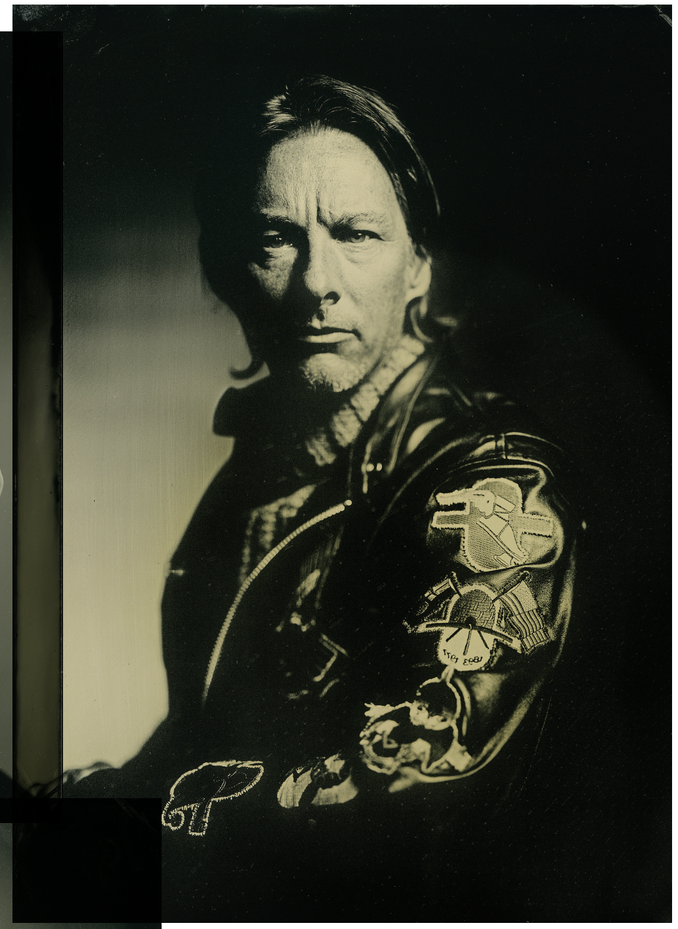
To do that, he inserts the plate into the back of his large-format view camera, perched atop a tripod like those seen in silent movies. It comes complete with black bellows and a draping dark cloth that Bernstein hunkers beneath while taking shots.

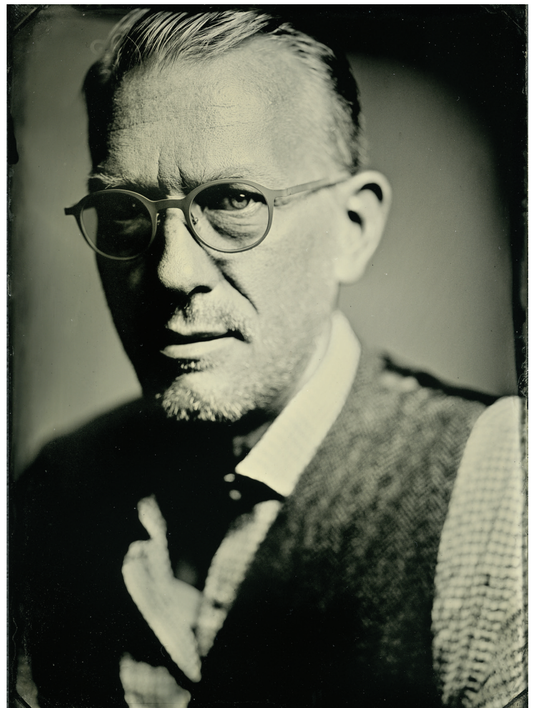
After composing the picture, he releases the shutter and a loud *POP!* accompanies a brilliant blast of white light from the powerful flash unit, stationed a few feet off to the side of his subject. Bernstein then removes the plate from the camera and carries it to the freestanding portable darkroom by the folding tables. There he quickly pours about an ounce of developer onto it. And after no more than 15 seconds, he lightly rinses it with water.

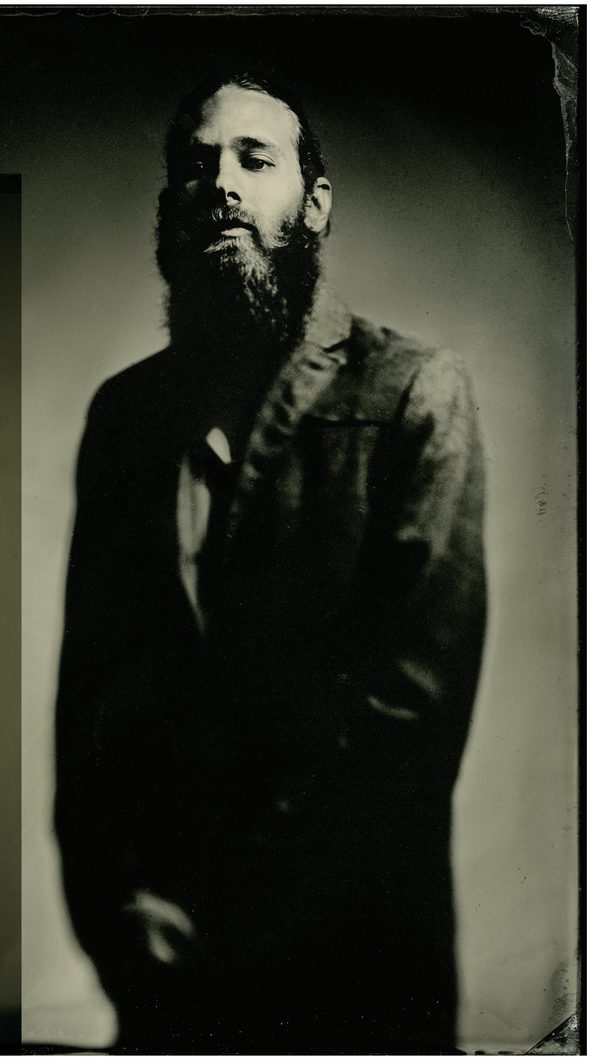
Then comes the *Aha* moment. "I still think putting it in the fixer and watching it change from a negative to a positive is pretty magical," he says. "Seeing the instant feedback–it's just so thrilling. There's something tangible that you're holding in your hands that you've created from scratch."

Poison Do Not Touch!! his handwritten sign above the vertical fixing bath reads. "I'm careful almost to the point of paranoia, especially when dealing with this potassium cyanide," he says, never taking his eyes off the face that's materializing within the toxic wetness.

"The reason I got into this as a hobby was not so much to pursue my interest in







science, but to create something from scratch," he says. "I wanted to create something with a bit more texture. It often yields unpredictable surprises due to the multitude of variables that affect the outcome."

Bernstein says the results with traditional film were very smooth and almost slick. But wet-plate's chemical process fascinated him, as did the incredible resolution that it's capable of—"a practically grainless process."

Bernstein created his first landscape with this process back in 2000 after driving 2,500 miles out near the Columbia River, between Oregon and Washington State. "You can see absolutely every rock in there," he says pointing to his stunning landscape portrait that appears in his book, *Collodion Travelogue* (Blurb.com, 2009).

Bernstein says he didn't go into this with nostalgia in mind. His idea was to always do contemporary work. "It's just that the aesthetic of this process is so 19th-century-looking, it's hard to make a contemporary image without it having a nod to the past."

Bernstein has hosted "Tin Type Portrait Sessions" for the past two years and plans to continue the all-day events. And he still maintains a thriving commercial photography business as well. His tin type portraits hang in homes and appear as Facebook profile pics for most people who have had theirs taken. Bernstein has also instructed wet-plate photography workshops for the past 18 years. A former student of his began the Facebook group called Collodion Bastards, which now has more than 5,000 members. To see more of his work or schedule a portrait session or other photography, visit DaleBernstein.com. ✂